

# TIPS VENDOR AGREEMENT

Between K-USA LLC-dba DYMEC and  
(Company Name)

**THE INTERLOCAL PURCHASING SYSTEM (TIPS),**  
a Department of Texas Education Service Center Region 8 for  
TIPS RFP 220105 Technology Solutions, Products and Services

## General Information

The Vendor Agreement ("Agreement") made and entered into by and between The Interlocal Purchasing System (hereinafter "TIPS") a government cooperative purchasing program authorized by the Region 8 Education Service Center, having its principal place of business at 4845 US Hwy 271 North, Pittsburg, Texas 75686 and the TIPS Vendor. This Agreement consists of the provisions set forth below, including provisions of all attachments referenced herein. In the event of a conflict between the provisions set forth below and those contained in any attachment, the provisions set forth shall control unless otherwise agreed by the parties in writing and by signature and date on the attachment.

A Purchase Order ("PO"), Agreement or Contract is the TIPS Member's approval providing the authority to proceed with the negotiated delivery order under the Agreement. Special terms and conditions as agreed between the Vendor and TIPS Member should be added as addendums to the Purchase Order, Agreement or Contract. Items such as certificate of insurance, bonding requirements, small or disadvantaged business goals are some, but not all, of the possible addendums.

## Terms and Conditions

### Freight

All quotes to Members shall provide a line item for cost for freight or shipping regardless if there is a charge or not. If no charge for freight or shipping, indicate by stating "No Charge", "\$0", "included in price" or other similar indication. Otherwise, all shipping, freight or delivery changes shall be passed through to the TIPS Member at cost with no markup and said charges shall be agreed by the TIPS Member unless alternative shipping terms are agreed by TIPS as a result of the proposal award.

### Warranty Conditions

All new supplies equipment and services shall include ***manufacturer's minimum standard warranty*** unless otherwise agreed to in writing. Vendor shall be legally permitted to sell all products offered for sale to TIPS Members if the offering is included in the Request for Proposal ("RFP") category. All goods proposed and sold shall be new unless clearly stated in writing.

### Customer Support

The Vendor shall provide timely and accurate customer support for orders to TIPS Members as agreed by the Parties. Vendors shall respond to such requests within a commercially reasonable time after receipt of the request. If support and/or training is a line item sold or packaged with a sale, support shall be as agreed with the TIPS Member.

## **Agreements**

Agreements for purchase will normally be put into effect by means of a contract, agreement, or purchase order(s) executed by authorized agents of the TIPS Member participating government entities, but other means of placing an order may be used at the Member's discretion. Vendor accepts and understands that when a purchase order or similar purchase document is sent from a customer through TIPS to the Vendor, TIPS is recording the purchase and verifying whether the purchase is within the parameters of the TIPS Contract only. Vendor agrees that TIPS is not a legal party to the purchase order or similar purchase document and TIPS is not responsible for identifying fraud, mistakes, or misrepresentations for the specific order. Vendor agrees that any purchase order or similar purchase document issued from a customer to Vendor, even when processed through TIPS, constitutes a legal contract between the customer and Vendor only. A Vendor that accepts a purchase order or similar purchase document and fulfills an order, even when processed through TIPS, is representing that the vendor has carefully reviewed the purchase order or similar purchase document for legality, authenticity, and accuracy.

## **Tax exempt status**

Most TIPS Members are tax exempt and the related laws and/or regulations of the controlling jurisdiction(s) of the TIPS Member shall apply.

## **Assignments of Agreements**

No assignment of this Agreement may be made without the prior notification of TIPS. Written approval of TIPS shall not be unreasonably withheld. Payment for delivered goods and services can only be made to the awarded Vendor, Vendor designated reseller or vendor assigned company.

## **Disclosures**

- Vendor and TIPS affirm that he/she, or any authorized employees or agents, has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with this Agreement.
- Vendor shall attach, in writing, a complete description of any and all relationships that might be considered a conflict of interest in doing business with the TIPS program.
- The Vendor affirms that, to the best of his/her knowledge, the offer has been arrived at independently, and is submitted without collusion with anyone to obtain information or gain any favoritism that would in any way limit competition or give an unfair advantage over other vendors in the award of this Agreement.

## **Term of Agreement and Renewals**

The Agreement with TIPS is for approximately five (5) years with an option for renewal for an additional one (1) consecutive year. If TIPS offers the renewal extension year, the Vendor will be notified by email to the primary contact of the awarded Vendor and shall be deemed accepted by the Vendor unless the awarded Vendor notifies TIPS of its objection to the additional term. TIPS may or may not exercise the available extension(s) provided in the original solicitation beyond the base five-year term. Whether or not to offer the extension is at the sole discretion of TIPS.

**“Start Date” for Term Calculation Purposes Only:** Regardless of actual award/effective date of Contract, for Agreement “term” calculation purposes only, the Agreement “start date” is the last day of the month that

Award Notifications are anticipated as published in the Solicitation.

**Example:** If the anticipated award date published in the Solicitation is May 22, 2020 but extended negotiations delay award until June 27, 2020 the end date of the resulting initial “five-year” term Agreement, (which is subject to an extension(s)) will still be May 31, 2025 in this example.

**“Termination Date”:** The scheduled Agreement “termination date” shall be the last day of the month of the month of the Original Solicitation’s Anticipated Award Date plus five years.

**Example:** If the original term is approximately five years, and the solicitation provides an anticipated award date of May 22, 2020, the expiration date of the original five-year term shall be May 31, 2025 in this example.

**Extensions:** Any extensions of the original term shall begin on the next day after the day the original term expires.

**Example Following the Previous Example:** If TIPS offers a one-year extension, the expiration of the extended term shall be May 31, 2026 in this example.

TIPS may offer to extend Vendor Agreements to the fullest extent the original Solicitation permits.

TIPS reserves the right to solicit proposals at any time it is in the best interest of TIPS and/or its members.

**Automatic Renewal Clauses Incorporated in Awarded Vendor Agreements with TIPS Members Resulting from the Solicitation and with the Vendor Named in this Agreement.**

No Agreement for goods or services with a TIPS Member by the awarded vendor named in this Agreement that results from the solicitation award named in this Agreement, may incorporate an automatic renewal clause that exceeds month to month terms with which the TIPS Member must comply. All renewal terms incorporated in an Agreement by the vendor with the TIPS Member shall only be valid and enforceable when the vendor receives written confirmation by purchase order, executed Agreement or other written instruction issued by the TIPS Member for any renewal period. The purpose of this clause is to avoid a TIPS Member inadvertently renewing an Agreement during a period in which the governing body of the TIPS Member has not properly appropriated and budgeted the funds to satisfy the Agreement renewal. This term is not negotiable and any Agreement between a TIPS Member and a TIPS awarded vendor with an automatic renewal clause that conflicts with these terms is rendered void and unenforceable.

**Shipments**

The Vendor shall ship, deliver or provide ordered products or services within a commercially reasonable time after the receipt of the order from the TIPS Member. If a delay in said delivery is anticipated, the Vendor shall notify TIPS Member as to why delivery is delayed and shall provide an estimated time for completion of the order. TIPS or the requesting entity may cancel the order if estimated delivery time is not acceptable or not as agreed by the parties.

**Invoices**

Each invoice or pay request shall include the TIPS Member’s purchase order number or other identifying designation as provided in the order by the TIPS Member. If applicable, the shipment tracking number or pertinent information for verification of TIPS Member receipt shall be made available upon request.

**Payments**

The TIPS Member will make payments directly to the Vendor, the Vendor Assigned Dealer or as agreed by the Vendor and the TIPS Member after receiving invoice and in compliance with applicable payment statute(s), whichever is the greater time or as otherwise provided by an agreement of the parties.

### **Pricing**

Price increases will be honored according to the terms of the solicitation. All pricing submitted to TIPS shall include the participation fee, as provided in the solicitation, to be remitted to TIPS by the Vendor. Vendor will not show adding the fee to the invoice presented to TIPS Member customer.

### **Participation Fees and Reporting of Sales to TIPS by Vendor**

The Participation Fee that was published as part of the Solicitation and the fee published is the legally effective fee, along with any fee conditions stated in the Solicitation. Collection of the fees by TIPS is required under Texas Government Code §791.011 Et seq. Fees are due on all TIPS purchases reported by either Vendor or Member. Fees are due to TIPS upon payment by the Member to the Vendor, Reseller or Vendor Assigned Dealer. Vendor, Reseller or Vendor Assigned Dealer agrees that the participation fee is due to TIPS for all Agreement sales immediately upon receipt of payment including partial payment, from the Member Entity and must be paid to TIPS at least on a monthly basis, specifically within 31 calendar days of receipt of payment, if not more frequently, or as otherwise agreed by TIPS in writing and signed by an authorized signatory of TIPS. Thus, when an awarded Vendor, Reseller or Vendor Assigned Dealer receives any amount of payment, even partial payment, for a TIPS sale, the legally effective fee for that amount is immediately due to TIPS from the Vendor and fees due to TIPS should be paid at least on a monthly basis, specifically within 31 calendar days of receipt of payment, if not more frequently.

### **Reporting of Sales to TIPS by Vendor**

Vendor is required to report all sales under the TIPS contract to TIPS. When a public entity initiates a purchase with a TIPS Awarded Vendor, if the Member inquires verbally or in writing whether the Vendor holds a TIPS Contract, it is the duty of the Vendor to verify whether or not the Member is seeking a TIPS purchase. Once verified, the Vendor must include the TIPS Contract number on any communications and related sales documents exchanged with the TIPS Member entity. To report sales, the Vendor must login to the TIPS Vendor Portal online at [https://www.tips-usa.com/vendors\\_form.cfm](https://www.tips-usa.com/vendors_form.cfm) and click on the PO's and Payments tab. Pages 3-7 of the [Vendor Portal User Guide](#) will walk you through the process of reporting sales to TIPS. Please refer to the TIPS [Accounting FAQ's](#) for more information about reporting sales and if you have further questions, contact the Accounting Team at [accounting@tips-usa.com](mailto:accounting@tips-usa.com). The Vendor or vendor assigned dealers are responsible for keeping record of all sales that go through the TIPS Agreement and submitting same to TIPS. Failure to render the participation fee to TIPS shall constitute a breach of this agreement with our parent governmental entity, Texas Education Service Center Region 8, as established by the Texas legislature and shall be grounds for termination of this agreement and any other agreement held with TIPS and possible legal action. Any overpayment of participation fees to TIPS by a Vendor will be refunded to the Vendor within ninety (90) days of receipt of notification if TIPS receives written notification of the overpayment not later than the expiration of six (6) months from the date of overpayment and TIPS determines that the amount was not legally due to TIPS pursuant to this agreement and applicable law. It is the Vendor's responsibility to identify which sales are TIPS Agreement sales and pay the correct participation fee due for TIPS Agreement sales. Any notification of overpayment received by TIPS after the expiration of six (6) months from the date of overpayment will be non-refundable. Region 8 ESC and TIPS reserve the right to extend the six (6) month deadline to notify if approved by the Region 8 ESC Board of Directors. TIPS reserves all rights under the law to collect the fees due. Please contact TIPS at [tips@tips-usa.com](mailto:tips@tips-usa.com) or call (866) 839-8477 if you have questions about paying fees.

### **Indemnity**

The Vendor agrees to indemnify and hold harmless and defend TIPS, TIPS Member(s), officers and employees from and against all claims and suits by third parties for damages, injuries to persons (including death), property damages, losses, and expenses including court costs and reasonable attorney's fees, arising out of, or resulting from, Vendor's performance under this Agreement, including all such causes of action based upon common, constitutional, or statutory law, or based in whole or in part, upon allegations of negligent or intentional acts on the part of the Vendor, its officers, employees, agents, subcontractors, licensees, or invitees. Parties found liable shall pay their proportionate share of damages as agreed by the parties or as ordered by a court of competent jurisdiction over the case. **NO LIMITATION OF LIABILITY FOR DAMAGES FOR PERSONAL INJURY OR PROPERTY DAMAGE ARE PERMITTED OR AGREED BY TIPS/ESC REGION 8.** Per Texas Education Code §44.032(f), and pursuant to its requirements only, reasonable Attorney's fees are recoverable by the prevailing party in any dispute resulting in litigation.

### **State of Texas Franchise Tax**

By signature hereon, the Vendor hereby certifies that he/she is not currently delinquent in the payment of any franchise taxes owed the State of Texas under Chapter 171, Tax Code.

### **Miscellaneous**

The Vendor acknowledges and agrees that continued participation in TIPS is subject to TIPS sole discretion and that any Vendor may be removed from the participation in the Program at any time with or without cause. Nothing in the Agreement or in any other communication between TIPS and the Vendor may be construed as a guarantee that TIPS or TIPS Members will submit any orders at any time. TIPS reserves the right to request additional proposals for items or services already on Agreement at any time.

### **Purchase Order Pricing/Product Deviation**

If a deviation of pricing/product on a Purchase Order or contract modification occurs between the Vendor and the TIPS Member, TIPS must be notified within five (5) business days of receipt of change order.

### **Termination for Convenience of TIPS Agreement Only**

TIPS reserves the right to terminate this agreement for cause or no cause for convenience with a thirty (30) days prior written notice. Termination for convenience is conditionally required under Federal Regulations 2 CFR part 200 if the customer is using federal funds for the procurement. All purchase orders presented to the Vendor, but not fulfilled by the Vendor, by a TIPS Member prior to the actual termination of this agreement shall be honored at the option of the TIPS Member. The awarded Vendor may terminate the agreement with ninety (90) days prior written notice to TIPS 4845 US Hwy North, Pittsburg, Texas 75686. The vendor will be paid for goods and services delivered prior to the termination provided that the goods and services were delivered in accordance with the terms and conditions of the terminated agreement. This termination clause does not affect the sales agreements executed by the Vendor and the TIPS Member customer pursuant to this agreement. TIPS Members may negotiate a termination for convenience clause that meets the needs of the transaction based on applicable factors, such as funding sources or other needs.

### **TIPS Member Purchasing Procedures**

Usually, purchase orders or their equal are issued by participating TIPS Member to the awarded vendor and should indicate on the order that the purchase is per the applicable TIPS Agreement Number. Orders are typically emailed to TIPS at [tipspo@tips-usa.com](mailto:tipspo@tips-usa.com).

- Awarded Vendor delivers goods/services directly to the participating member.
- Awarded Vendor invoices the participating TIPS Member directly.

- Awarded Vendor receives payment directly from the participating member.
- Fees are due to TIPS upon payment by the Member to the Vendor. Vendor agrees to pay the participation fee to TIPS for all Agreement sales upon receipt of payment including partial payment, from the Member Entity or as otherwise agreed by TIPS in writing and signed by an authorized signatory of TIPS.

### **Licenses**

Awarded Vendor shall maintain, in current status, all federal, state and local licenses, bonds and permits required for the operation of the business conducted by awarded Vendor. Awarded Vendor shall remain reasonably fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of goods or services under the Agreement. TIPS and TIPS Members reserves the right to stop work and/or cancel an order or terminate this or any other sales Agreement of any awarded Vendor whose license(s) required for performance under this Agreement have expired, lapsed, are suspended or terminated subject to a 30-day cure period unless prohibited by applicable statute or regulation.

### **Novation**

If awarded Vendor sells or transfers all assets, rights or the entire portion of the assets or rights required to perform this Agreement, a successor in interest must guarantee to perform all obligations under this Agreement. A simple change of name agreement will not change the Agreement obligations of awarded vendor. TIPS will consider Contract Assignments on a case by case basis. TIPS must be notified within five (5) business days of the transfer of assets or rights.

### **Site Requirements (*only when applicable to service or job*)**

**Cleanup:** When performing work on site at a TIPS Member's property, awarded Vendor shall clean up and remove all debris and rubbish resulting from their work as required or directed by TIPS Member or as agreed by the parties. Upon completion of work, the premises shall be left in good repair and an orderly, neat, clean and unobstructed condition.

**Preparation:** Awarded Vendor shall not begin a project for which TIPS Member has not prepared the site, unless awarded Vendor does the preparation work at no cost, or until TIPS Member includes the cost of site preparation in a purchase order. Site preparation includes, but is not limited to: moving furniture, installing wiring for networks or power, and similar pre-installation requirements.

**Registered sex offender restrictions:** For work to be performed at schools, awarded Vendor agrees that no employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are, or reasonably expected to be, present unless otherwise agreed by the TIPS Member. Awarded Vendor agrees that a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at the TIPS Member's discretion. Awarded Vendor must identify any additional costs associated with compliance of this term. If no costs are specified, compliance with this term will be provided at no additional charge. **Safety measures:** Awarded Vendor shall take all reasonable precautions for the safety of employees on the worksite, and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Awarded Vendor shall post warning signs against all hazards created by the operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.

### **Safety Measures**

Awarded Vendor shall take all reasonable precautions for the safety of employees on the worksite, and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Awarded vendor shall post warning signs against all hazards created by the operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public

and existing structures from injury or damage.

### **Smoking**

Persons working under Agreement shall adhere to the TIPS Member's or local smoking statutes, codes or policies.

### **Marketing**

Awarded Vendor agrees to allow TIPS to use their name and logo within TIPS website, marketing materials and advertisement subject to any reasonable restrictions provided to TIPS in the Proposal to the Solicitation. The Vendor may submit an acceptable use directive for Vendor's names and logos with which TIPS agrees to comply. Any use of TIPS name and logo or any form of publicity, inclusive of press release, regarding this Agreement by awarded vendor must have prior approval from TIPS which will not be unreasonably withheld. Request may be made by email to TIPS@TIPS-USA.COM.

### **Supplemental Agreements**

The TIPS Member entity participating in the TIPS Agreement and awarded Vendor may enter into a separate Supplemental Agreement or contract to further define the level of service requirements over and above the minimum defined in this Agreement such as but not limited to, invoice requirements, ordering requirements, specialized delivery, etc. Any Supplemental Agreement or contract developed as a result of this Agreement is exclusively between the TIPS Member entity customer and the Vendor. TIPS, its agents, TIPS Members and employees not a party to the Supplemental Agreement with the TIPS Member customer, shall not be made party to any claim for breach of such agreement unless named and agreed by the Party in question in writing in the agreement. If a Vendor submitting a Proposal requires TIPS and/or TIPS Member to sign an additional agreement, those agreements shall comply with the award made by TIPS to the Vendor. Supplemental Vendor's Agreement documents may not become part of TIPS' Agreement with Vendor unless and until an authorized representative of TIPS reviews and approves it. TIPS review and approval may be at any time during the life of this Vendor Agreement. TIPS permits TIPS Members to negotiate additional terms and conditions with the Vendor for the provision of goods or services under the Vendor's TIPS Agreement so long as they do not materially conflict with this Agreement.

### **Survival Clause**

All applicable sales, leases, Supplemental Agreements, contracts, software license agreements, warranties or service agreements that were entered into between Vendor and TIPS or the TIPS Member Customer under the terms and conditions of this Agreement shall survive the expiration or termination of this Agreement. All Orders, Purchase Orders issued or contracts executed by TIPS or a TIPS Member and accepted by the Vendor prior to the expiration or termination of this agreement, shall survive expiration or termination of the Agreement, subject to previously agreed terms and conditions agreed by the parties or as otherwise specified herein relating to termination of this agreement.

### **Legal obligations**

It is the responding Vendor's responsibility to be aware of and comply with all local, state and federal laws governing the sale of products/services identified in the applicable Solicitation that resulted in this Vendor Agreement and any awarded Agreement thereof. Applicable laws and regulations must be followed even if not specifically identified herein.

### **Audit rights**

Due to transparency statutes and public accountability requirements of TIPS and TIPS Members', the awarded Vendor shall, at their sole expense, maintain appropriate due diligence of all purchases made by

TIPS Member that utilizes this Agreement. TIPS and Region 8 ESC each reserve the right to audit the accounting of TIPS related purchases for a period of three (3) years from the time such purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective date of termination. In order to ensure and confirm compliance with this agreement, TIPS shall have authority to conduct audits of Awarded Vendor's pricing or TIPS transaction documentation with TIPS Members with 30 days' notice unless the audit is ordered by a Court Order or by a Government Agency with authority to do so without notice. Notwithstanding the foregoing, in the event that TIPS is made aware of any pricing being offered to eligible entities that is materially inconsistent with the pricing under this agreement, TIPS shall have the ability to conduct the audit internally or may engage a third- party auditing firm to investigate any possible non- compliant conduct or may terminate the Agreement according to the terms of this Agreement. In the event of an audit, the requested materials shall be reasonably provided in the time, format and at the location acceptable to Region 8 ESC or TIPS. TIPS agrees not to perform a random audit the TIPS transaction documentation more than once per calendar year, but reserves the right to audit for just cause or as required by any governmental agency or court with regulatory authority over TIPS or the TIPS Member.

### **Force Majeure**

If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

### **Choice of Law**

The Agreement between the Vendor and TIPS/ESC Region 8 and any addenda or other additions resulting from this procurement process, however described, shall be governed by, construed and enforced in accordance with the laws of the State of Texas, regardless of any conflict of laws principles.

### **Venue, Jurisdiction and Service of Process**

Any Proceeding arising out of or relating to this procurement process or any contract issued by TIPS resulting from or any contemplated transaction shall be brought in a court of competent jurisdiction in Camp County, Texas and each of the parties irrevocably submits to the exclusive jurisdiction of said court in any such proceeding, waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of the Proceeding shall be heard and determined only in any such court, and agrees not to bring any proceeding arising out of or relating to this procurement process or any contract resulting from or any contemplated transaction in any other court. The parties agree that either or both of them may file a copy of this paragraph with any court as written evidence of the knowing, voluntary and freely bargained for agreement between the parties irrevocably to waive any objections to venue or to convenience of forum. Process in any Proceeding referred to in the first sentence of this Section may be served on any party anywhere in the world. Venue for any dispute resolution process, other than litigation, between TIPS and the Vendor shall be located in Camp or Titus County, Texas.

### **Project Delivery Order Procedures**

The TIPS Member having approved and signed an interlocal agreement, or other TIPS Membership document, may make a request of the awarded Vendor under this Agreement when the TIPS Member desires goods or services awarded to the Vendor. Notification may occur via phone, the web, courier, email, fax, or

in person. Upon notification of a pending request, the awarded Vendor shall acknowledge the TIPS Member's request as soon as possible, but must make contact with the TIPS Member within two working days.

#### **Status of TIPS Members as Related to This Agreement**

TIPS Members stand in the place of TIPS as related to this agreement and have the same access to the proposal information and all related documents. TIPS Members have all the same rights under the awarded Agreement as TIPS.

#### **Vendor's Resellers as Related to This Agreement**

Vendor's Named Resellers ("Resellers") under this Agreement shall comply with all terms and conditions of this agreement and all addenda or incorporated documents. All actions related to sales by Authorized Vendor's Resellers under this Agreement are the responsibility of the awarded Vendor. If Resellers fail to report sales to TIPS under your Agreement, the awarded Vendor is responsible for their contractual failures and shall be billed for the fees. The awarded Vendor may then recover the fees from their named reseller.

#### **Support Requirements**

If there is a dispute between the awarded Vendor and TIPS Member, TIPS or its representatives may, at TIPS sole discretion, assist in conflict resolution if requested by either party. TIPS, or its representatives, reserves the right to inspect any project and audit the awarded Vendor's TIPS project files, documentation and correspondence related to the requesting TIPS Member's order. If there are confidentiality requirements by either party, TIPS shall comply to the extent permitted by law.

#### **Incorporation of Solicitation**

The TIPS Solicitation which resulted in this Vendor Agreement, whether a Request for Proposals, the Request for Competitive Sealed Proposals or Request for Qualifications solicitation, or other, the Vendor's response to same and all associated documents and forms made part of the solicitation process, including any addenda, are hereby incorporated by reference into this Agreement as if copied verbatim.

#### **SECTION HEADERS OR TITLES**

THE SECTION HEADERS OR TITLES WITHIN THIS DOCUMENT ARE MERELY GUIDES FOR CONVENIENCE AND ARE NOT FOR CLASSIFICATION OR LIMITING OF THE RESPONSIBILITIES OF THE PARTIES TO THIS DOCUMENT.

#### **STATUTORY REQUIREMENTS**

Texas governmental entities are prohibited from doing business with companies that fail to certify to this condition as required by Texas Government Code Sec. 2270.

By executing this agreement, you certify that you are authorized to bind the undersigned Vendor and that your company (1) does not boycott Israel; and (2) will not boycott Israel during the term of the Agreement.

You certify that your company is not listed on and does not and will not do business with companies that are on the Texas Comptroller of Public Accounts list of Designated Foreign Terrorists Organizations per Texas Gov't Code 2270.0153 found at <https://comptroller.texas.gov/purchasing/docs/foreign-terrorist.pdf>

You certify that if the certified statements above become untrue at any time during the life of this Agreement that the Vendor will notify TIPS within three (3) business day of the change by a letter on Vendor's letterhead from and signed by an authorized representative of the Vendor stating the non-compliance decision and the

TIPS Agreement number and description at:

Attention: General Counsel  
ESC Region 8/The Interlocal Purchasing System (TIPS)  
4845 Highway 271 North  
Pittsburg, TX, 75686  
And by an email sent to [bids@tips-usa.com](mailto:bids@tips-usa.com)

### Insurance Requirements

The undersigned Vendor agrees to maintain the below minimum insurance requirements for TIPS Contract Holders:

<b>General Liability</b>	\$1,000,000 each Occurrence/ Aggregate
<b>Automobile Liability</b>	\$300,000 Includes owned, hired & non-owned
<b>Workers' Compensation</b>	Statutory limits for the jurisdiction in which the Vendor performs under this Agreement.
<b>Umbrella Liability</b>	\$1,000,000

When the Vendor or its subcontractors are liable for any damages or claims, the Vendor's policy, when the Vendor is responsible for the claim, must be primary over any other valid and collectible insurance carried by the Member. Any immunity available to TIPS or TIPS Members shall not be used as a defense by the contractor's insurance policy. The coverages and limits are to be considered minimum requirements and in no way limit the liability of the Vendor(s). Insurance shall be written by a carrier with an A-; VII or better rating in accordance with current A.M. Best Key Rating Guide. Only deductibles applicable to property damage are acceptable, unless proof of retention funds to cover said deductibles is provided. "Claims made" policies will not be accepted. Vendor's required minimum coverage shall not be suspended, voided, cancelled, non-renewed or reduced in coverage or in limits unless replaced by a policy that provides the minimum required coverage except after thirty (30) days prior written notice by certified mail, return receipt requested has been given to TIPS or the TIPS Member if a project or pending delivery of an order is ongoing. Upon request, certified copies of all insurance policies shall be furnished to the TIPS or the TIPS Member.

## Special Terms and Conditions

- **Orders:** All Vendor orders received from TIPS Members must be emailed to TIPS at [tipspo@tips-usa.com](mailto:tipspo@tips-usa.com). Should a TIPS Member send an order directly to the Vendor, it is the Vendor's responsibility to forward a copy of the order to TIPS at the email above within 3 business days and confirm its receipt with TIPS.
- **Vendor Encouraging Members to bypass TIPS agreement:** Encouraging TIPS Members to purchase directly from the Vendor or through another agreement, when the Member has requested using the TIPS cooperative Agreement or price, and thereby bypassing the TIPS Agreement is a violation of the terms and conditions of this Agreement and will result in removal of the Vendor from the TIPS Program.
- **Order Confirmation:** All TIPS Member Agreement orders are approved daily by TIPS and sent to the Vendor. The Vendor should confirm receipt of orders to the TIPS Member (customer) within 3 business days.
- **Vendor custom website for TIPS:** If Vendor is hosting a custom TIPS website, updated pricing when

effective. TIPS shall be notified when prices change in accordance with the award.

- **Back Ordered Products:** If product is not expected to ship within the time provided to the TIPS Member by the Vendor, the Member is to be notified within 3 business days and appropriate action taken based on customer request.

The TIPS Vendor Agreement Signature Page is inserted here.

# TIPS Vendor Agreement Signature Form

RFP 220105 Technology Solutions, Products and Services

Company Name K-USA LLC-dba DYMEC

Address 1107 SE Willow Pl

City Blue Springs State MO Zip 64014

Phone 816-214-1946 Fax 480-287-8605

Email of Authorized Representative Thom.Sherer@dymec.com

Name of Authorized Representative Thom Sherer

Title Sales Director

Signature of Authorized Representative 

Date 2/10/2022

TIPS Authorized Representative Name David Fitts

Title Executive Director

TIPS Authorized Representative Signature 

Approved by ESC Region 8 

Date 5-23-2022

## **NOTICE TO MEMBERS REGARDING ATTRIBUTE RESPONSES**

TIPS VENDORS RESPOND TO ATTRIBUTE QUESTIONS AS PART OF TIPS COMPETITIVE SOLICITATION PROCESS. THE VENDOR'S RESPONSES TO ATTRIBUTE QUESTIONS ARE INCLUDED HEREIN AS "SUPPLIER RESPONSE." PLEASE BE ADVISED THAT DEVIATIONS, IF ANY, IN VENDOR'S RESPONSE TO ATTRIBUTE QUESTIONS MAY NOT REFLECT VENDOR'S FINAL ATTRIBUTE RESPONSE, WHICH IS SUBJECT TO NEGOTIATIONS PRIOR TO AWARD. PLEASE CONTACT THE TIPS OFFICE AT 866-839-8477 WITH QUESTIONS OR CONCERNS REGARDING VENDOR ATTRIBUTE RESPONSE DEVIATIONS. PLEASE KEEP IN MIND THAT TIPS DOES NOT PROVIDE LEGAL COUNSEL TO MEMBERS. TIPS RECOMMENDS THAT YOU CONSULT YOUR LEGAL COUNSEL WHEN EXECUTING CONTRACTS WITH OR MAKING PURCHASES FROM TIPS VENDORS.



**220105 Addendum 1  
DYMEC  
DYMEC  
Supplier Response**

**Event Information**

Number: 220105 Addendum 1  
Title: Technology Solutions, Products and Services  
Type: Request for Proposal  
Issue Date: 1/6/2022  
Deadline: 2/18/2022 03:00 PM (CT)  
Notes:

**IF YOU ALREADY HOLD TIPS CONTRACT 200105 TECHNOLOGY SOLUTIONS, PRODUCTS AND SERVICES ("200105") OR 210101 TECHNOLOGY SOLUTIONS, PRODUCTS AND SERVICES ("210101"), YOU DO NOT NEED TO RESPOND TO THIS SOLICITATION UNLESS YOU WISH TO REPLACE 200105 OR 210101 AT THIS TIME. IF YOU HOLD 200105 OR 210101, CHOOSE TO RESPOND HEREIN, AND ARE AWARDED ON THIS CONTRACT, YOUR 200105 OR 2101101 WILL BE TERMINATED AND REPLACED BY THIS CONTRACT.**

**IF YOU HOLD ANY OF THE FOLLOWING TIPS CONTRACTS AND YOU DO NOT HOLD 200105 OR 2101101, PER TIPS PRIOR NOTIFICATION, YOU MUST RESPOND TO THIS SOLICITATION BECAUSE YOUR SPECIFIC CONTRACT IS BEING CONSOLIDATED INTO OR REPLACED BY THIS CONTRACT.**

· **TIPS 190103 Web and Cloud Computing Services**

· **TIPS 181203 Management Software and Services**

· **TIPS 181204 Notification Systems**

**TIPS RESERVES THE RIGHT TO ISSUE, REBID, OR CANCEL ANY PLANNED SOLICITATIONS AT ANY TIME AS NECESSARY FOR THE NEEDS OF TIPS, TIPS VENDORS, AND TIPS MEMBERS.**

## **Contact Information**

Address: Region 8 Education Service Center  
4845 US Highway 271 North  
Pittsburg, TX 75686  
Phone: +1 (866) 839-8477  
Email: [bids@tips-usa.com](mailto:bids@tips-usa.com)

## DYMEC Information

Contact: Tom West  
Address: 1107 SE Willow Pl  
Blue Springs, MO 64014  
Phone: (816) 214-1946  
Fax: (480) 287-8605  
Toll Free: (816) 214-1946 x816  
Email: [twest@dymec.com](mailto:twest@dymec.com)  
Web Address: [www.dymec.com](http://www.dymec.com)

By submitting your response, you certify that you are authorized to represent and bind your company.

thom sherer

*Signature*

Submitted at 2/17/2022 9:34:42 AM

[thom.sherer@dymec.com](mailto:thom.sherer@dymec.com)

*Email*

## Supplier Note

I was unable to fill in our company name on the provided Vendor Agreement form. I scanned the top page, filled it in, and downloaded it to the "Company logo" location

## Requested Attachments

### Agreement Signature Form

220105 Agreement Signature Form.pdf

If you have not taken exception or deviation to the agreement language in the solicitation attributes, download the AGREEMENT SIGNATURE FORM from the "ATTACHMENTS" tab. This PDF document is a fillable form. Download the document to your computer, fill in the requested company information, print the file, SIGN the form, SCAN the completed and signed AGREEMENT SIGNATURE FORM, and upload here.

If you have taken exception to any of the agreement language and noted the exception in the deviations section of the attributes for the agreement, complete the AGREEMENT SIGNATURE FORM, but DO NOT SIGN until those deviations have been negotiated and resolved with TIPS management. Upload the unsigned form here, because this is a required document.

### All Other Certificates

PUB-DYMEC Product Pricing 2022A (1).xlsx

All Other Certificates (if applicable) must be scanned and uploaded. If vendor has more than one other certification scan into one document. (PDF Format ONLY)  
DO NOT UPLOAD encrypted or password protected files.

### Pricing Form 2

220105 Pricing Form 2.xlsx

The vendor must download the PRICING SPREADSHEET SHEET from the attachment tab, fill in the requested information and upload the completed spreadsheet.  
DO NOT UPLOAD encrypted or password protected files.

### Reference Form

220105 Reference\_Form.xls

The vendor must download the References spreadsheet from the attachment tab, fill in the requested information and upload the completed spreadsheet. DO NOT UPLOAD encrypted or password protected files.

### Conflict of Interest Form CIQ- ONLY REQUIRED IF A CONFLICT EXISTS PER THE INSTRUCTIONS

No response

ONLY REQUIRED IF A CONFLICT EXISTS PER THE INSTRUCTIONS

Conflict of Interest Form for Vendors that are required to submit the form. The Conflict of Interest Form is included in the Base documents or can be found at <https://www.tips-usa.com/assets/documents/docs/CIQ.pdf>.

## Proposed Goods and Services

DYMEC-Application-Product-Selection-Guide.pdf

Please upload one or more documents or sheets describing your offerings, line cards, catalogs, links to offerings OR list links to your offerings that illustrate the catalog of proposed lines of goods and or services you carry and offer under this proposal. It does not have to be exhaustive but should, at a minimum tell us what you are offering. It could be as simple as a sheet with your link to your online catalog of goods and services.

## D/M/WBE Certification OPTIONAL

No response

D/M/WBE Certification documentation may be scanned and uploaded if you desire to claim your status as one of the identified enterprises. (Disadvantaged Business Enterprise, Minority Business Enterprise and/or Woman Business Enterprise) If vendor has more than one certification scan into one document. (PDF Format ONLY)

DO NOT UPLOAD encrypted or password protected files.

## Warranty

No response

Warranty information (if applicable) must be scanned and uploaded. (PDF Format ONLY)

DO NOT UPLOAD encrypted or password protected files.

## Vendor Agreement

220105 Vendor Agreement.pdf

The vendor must download the Vendor Agreement from the attachment tab, fill in the requested information and upload the completed agreement.

DO NOT UPLOAD encrypted or password protected files.

## Pricing Form 1

220105 Pricing Form 1 (1).xlsx

The vendor must download the PRICING SPREADSHEET SHEET from the attachment tab, fill in the requested information and upload the completed spreadsheet.

DO NOT UPLOAD encrypted or password protected files.

## Supplementary

PUB-DYMEC Product Pricing 2022A (1).xlsx

Supplementary information may be scanned and uploaded. (Company information, brochures, catalogs, etc.) (PDF Format ONLY)

DO NOT UPLOAD encrypted or password protected files.

## Logo and Other Company Marks

220105 Vendor Agreement name.pdf

If you desire, please upload your company logo to be added to your individual profile page on the TIPS website. If any particular specifications are required for use of your company logo, please upload that information under the Supplementary section or another non-required section under the "Response Attachment" tab. Preferred Logo

Format: 300 x 225 px - .png, .eps, .jpeg preferred

## Certification of Corporate Offerer Form- COMPLETE ONLY IF OFFERER IS A CORPORATION

CERTIFICATION OF CORPORATE OFFERER FORM.pdf

COMPLETE AND UPLOAD FORM IN ATTACHMENTS SECTION ONLY IF OFFERER IS A CORPORATION

## Disclosure of Lobbying Activities Standard Form LLL

No response

ONLY IF you answered "I HAVE Lobbied per above" to attribute #66, please download and complete and upload the Standard Form-LLL, "disclosure Form to Report Lobbying," in the Response attachments section.

## Confidentiality Claim Form

220105 CONFIDENTIALITY CLAIM FORM.pdf

REQUIRED CONFIDENTIALITY FORM. Complete the form according to your company requirements, make any desired attachments and upload to the appropriate section under "Response Attachments" THIS FORM DETERMINES HOW ESC8/TIPS RESPONDS TO LEGAL PUBLIC INFORMATION REQUESTS.

## Current W-9 Tax Form

DYMEC\_W9-Signed2018.pdf

You are required by TIPS to upload a current W-9 Internal Revenue Service (IRS) Tax Form for your entity. This form will be utilized by TIPS to properly identify your entity.

## Bid Attributes

<b>1 Yes - No</b>	Disadvantaged/Minority/Women Business Enterprise - D/M/WBE/Federal HUBZone (Required by some participating governmental entities). Vendor certifies that their firm is a D/M/WBE or HUBZone? Vendor must upload proof of certification to the "Response Attachments" D/M/WBE CERTIFICATES section. <input type="text" value="NO"/>
<b>2 Yes - No</b>	Historically Underutilized Business - HUB (Required by some participating governmental entities) Vendor certifies that their firm is a HUB as defined by the State of Texas at <a href="https://comptroller.texas.gov/purchasing/vendor/hub/">https://comptroller.texas.gov/purchasing/vendor/hub/</a> . Proof may be submitted. Vendor must upload proof of certification to the "Response Attachments" HUB CERTIFICATES section. <input type="text" value="No"/>
<b>3 Yes - No</b>	The Vendor can provide services and/or products to all 50 US States? <input type="text" value="Yes"/>
<b>4 States Served:</b>	If answer is NO to question #3, please list which states can be served. (Example: AR, OK, TX) <input type="text" value="No response"/>
<b>5 Company and/or Product Description:</b>	This information will appear on the TIPS website in the company profile section, if awarded a TIPS contract. (Limit 750 characters.) <input type="text" value="Dymec, Inc is a manufacturer of temperature hardened Ethernet switches and routers designed to be installed in harsh environments. Typical installations include highway traffic cabinets, electrical power substations, and other places that do not provide air conditioned environments."/>
<b>6 Primary Contact Name</b>	Primary Contact Name <input type="text" value="Thom Sherer"/>
<b>7 Primary Contact Title</b>	Primary Contact Title <input type="text" value="Sales Director"/>
<b>8 Primary Contact Email</b>	Primary Contact Email <input type="text" value="thom.sherer@dymec.com"/>
<b>9 Primary Contact Phone</b>	Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="7138260739"/>

<b>10</b>	<b>Primary Contact Fax</b> Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="4802878605"/>
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<b>11</b>	<b>Primary Contact Mobile</b> Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="7138260739"/>
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<b>12</b>	<b>Secondary Contact Name</b> Secondary Contact Name <input type="text" value="Tom West"/>
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<b>13</b>	<b>Secondary Contact Title</b> Secondary Contact Title <input type="text" value="President"/>
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<b>14</b>	<b>Secondary Contact Email</b> Secondary Contact Email <input type="text" value="twest@dymec.com"/>
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<b>15</b>	<b>Secondary Contact Phone</b> Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="8162141946"/>
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<b>16</b>	<b>Secondary Contact Fax</b> Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="4802878605"/>
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<b>17</b>	<b>Secondary Contact Mobile</b> Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="8162141946"/>
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<b>18</b>	<b>Admin Fee Contact Name</b> Admin Fee Contact Name. This person is responsible for paying the admin fee to TIPS. <input type="text" value="Tom West"/>
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<b>19</b>	<b>Admin Fee Contact Email</b> Admin Fee Contact Email <input type="text" value="twest@dymec.com"/>
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<b>20</b>	<b>Admin Fee Contact Phone</b> Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="8162141946"/>
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<b>21</b>	<b>Purchase Order Contact Name</b> Purchase Order Contact Name. This person is responsible for receiving Purchase Orders from TIPS. <input type="text" value="Thom Sherer"/>
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<b>22</b>	<b>Purchase Order Contact Email</b> Purchase Order Contact Email <input type="text" value="thom.sherer@dymec.com"/>
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<b>23</b>	<b>Purchase Order Contact Phone</b> Enter 10 digit phone number. (No dashes or extensions) Example: 8668398477 <input type="text" value="7138260739"/>
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<b>24</b>	<b>Company Website</b> Company Website (Format - www.company.com) <input type="text" value="www.dymec.com"/>
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<b>25</b>	<b>Entity D/B/A's and Assumed Names</b> Please identify all of your entity's assumed names and D/B/A's. Please note that you will be identified publicly by the legal name under which you responded to this solicitation unless you organize otherwise with TIPS after award. <input type="text" value="K-USA LLC-dba DYMEC"/>
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<b>26</b>	<b>Primary Address</b> Primary Address <input type="text" value="1107 SE Willow Pl."/>
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<b>27</b>	<b>Primary Address City</b> Primary Address City <input type="text" value="Blue Springs"/>
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<b>28</b>	<b>Primary Address State</b> Primary Address State (2 Digit Abbreviation) <input type="text" value="MO"/>
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<b>29</b>	<b>Primary Address Zip</b> Primary Address Zip <input type="text" value="64014-5248"/>
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**3**  
**0** **Search Words:**

Please list search words to be posted in the TIPS database about your company that TIPS website users might search. Words may be product names, manufacturers, or other words associated with the category of award. YOU MAY NOT LIST NON-CATEGORY ITEMS. (Limit 500 words) (Format: product, paper, construction, manufacturer name, etc.)

hardened Ethernet switch, DYMEC, K-USA, hardened Ethernet router, PoE switch, PoE router, fiber media converter, SFP, media converter, serial to Ethernet converter

**3**  
**1** **Do you want TIPS Members to be able to spend Federal grant funds with you if awarded? Is it your intent to be able to sell to our members regardless of the fund source, whether it be local, state or federal?**

Most of our members receive Federal Government grants or other funding and they make up a significant portion of their budgets. The Members need to know if your company is willing to sell to them when they spend federal budget funds on their purchase. There are attributes that follow that include provisions from the federal regulations in 2 CFR part 200, etc. Your answers will determine if your award will be designated as eligible for TIPS Members to utilize federal funds with your company.

Do you want TIPS Members to be able to spend Federal funds, at the Member's discretion, with you?

Yes

**3**  
**2** **Yes - No**

Certification of Residency (Required by the State of Texas) The vendor's ultimate parent company or majority owner:

(A) has its principal place of business in Texas;

OR

(B) employs at least 500 persons in Texas?

This question is required as a data gathering function for information to our members making purchases with awarded vendors. It does not affect scoring with TIPS.

No

**3**  
**3** **Company Residence (City)**

Vendor's principal place of business is in the city of?

Blue Springs

**3**  
**4** **Company Residence (State)**

Vendor's principal place of business is in the state of?

MO

**3 5 Discount Offered - CAUTION READ CAREFULLY BECAUSE VENDORS FREQUENTLY MAKE MISTAKES ON THIS ATTRIBUTE QUESTION**

Remember this is a **MINIMUM** discount percentage. So, be sure that the discount percentage inserted here can be applied to ANY OFFERING OF GOODS OR SERVICES THROUGHOUT THE LIFE OF THE CONTRACT.

CAUTION: BE CERTAIN YOU CAN HONOR THIS **MINIMUM** DISCOUNT PERCENTAGE ON ANY OFFERED SERVICE OR GOOD NOW OR DURING THE LIFE OF THE CONTRACT.

What is the **MINIMUM** percentage discount off of any item or service you offer to TIPS Members that is in your regular catalog (as defined in the solicitation specifications document), website, store or shelf pricing or when adding new goods or services to your offerings during the life of the contract? The resulting price of any goods or services Catalog list prices after this discount is applied is a ceiling on your pricing and not a floor because, in order to be more competitive in the individual circumstance, you may offer a larger discount depending on the items or services purchased and the quantity at time of sale. Please note that any specific greater discount offered for a particular product, brand, or service listed in Vendor's proposal will control and Vendor will be required to honor that greater specific discount, in excess of the minimum discount, for that particular product, brand, or service for the life of the contract.

Must answer with a number between 0% and 100%.

**3 6 MINIMUM Discount Term**

Does the vendor agree to at least offer, for the life of the Agreement, the Minimum Discount Percentage off list or catalog proposed by Vendor in response to the Attribute entitled "Discount Offered - CAUTION READ CAREFULLY BECAUSE VENDORS FREQUENTLY MAKE MISTAKES ON THIS ATTRIBUTE QUESTION"? TIPS will utilize this response to satisfy the Long Term Cost scoring evaluation criteria. A "YES" answer will be awarded the maximum 10 points for this criterion out of the 100 total points and a "NO" answer is awarded 0 points.

**3 7 Yes - No**

If awarded on this TIPS Contract, for the duration of the Contract, Vendor agrees to provide, upon request, their then current catalog pricing, as defined in the solicitation and below, to TIPS upon request for any goods and services offered on Vendor's TIPS Contract.

"Catalog" means the available list of tangible personal property or services, in the most current listing, regardless of date, during the life of the contract, that takes the form of a catalog, price list, schedule, shelf price or other form that:

- A. is regularly maintained by the manufacturer or Vendor of an item; and
- B. is either published or otherwise available for inspection by a customer during the purchase process;
- C. to which the minimum discount proposed by the proposing Vendor may be applied.

**3 8 TIPS Administration Fee**

By submitting a proposal, I agree that all pricing submitted to TIPS shall include the Administration Fee, as designated in the solicitation or as otherwise agreed in writing which shall be remitted to TIPS by the Vendor, or the vendor's named resellers, and as agreed to in the Vendor Agreement. I agree that the fee shall not and will not be added by the Vendor as a separate line item on a TIPS member invoice, quote, proposal or any other written communications with the TIPS member.

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**Yes - No**

Vendor agrees to remit to TIPS the required administration fee or, if resellers are named, Vendor agrees to guarantee the fee remittance by or for the reseller named by the vendor?

TIPS/ESC Region 8 is required by Texas Government Code § 791 to be compensated for its work and thus, failure to agree shall render your response void and it will not be considered.

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**TIPS Administration Fee Paid by Vendor - Not Charged to Customer**

Vendor understands and agrees that it owes TIPS a TIPS Administration Fee (published in the RFP/RCSP document) on every TIPS sale made under an awarded TIPS Contract. Vendor further understands and agrees that Vendor shall submit pricing with this proposal which includes and accounts for the TIPS Administration Fee and **shall never** separately charge the TIPS Member Customer the TIPS fee or add the TIPS Administration Fee line item to an invoice or similar purchase document. Submission of this proposal is Vendor's certification that Vendor agrees to this mandatory term.

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**Additional Discounts?**

Do you offer additional discounts to TIPS members for large order quantities or large scope of work?

4  
2

**Years in Business as Proposing Company**

Years in business as proposing company?

4  
3

**Resellers:**

Does the vendor have resellers that it will name under this contract? Resellers are defined as other companies that sell your products under an agreement with you, the awarded vendor of TIPS.

EXAMPLE: BIGmart is a reseller of ACME brand televisions. If ACME were a TIPS awarded vendor, then ACME would list BIGmart as a reseller.

(If applicable, Vendor should add all Authorized Resellers within the TIPS Vendor Portal upon award).

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**Right of Refusal**

The proposing vendor has the right not to sell under the awarded agreement with a TIPS member at vendor's discretion unless required by law.

**4** **NON-COLLUSIVE BIDDING CERTIFICATE**

**5** By submission of this bid or proposal, the Bidder certifies that:

- 1) This bid or proposal has been independently arrived at without collusion with any other Bidder or with any Competitor;
- 2) This bid or proposal has not been knowingly disclosed and will not be knowingly disclosed, prior to the opening of bids, or proposals for this project, to any other Bidder, Competitor or potential competitor:
- 3) No attempt has been or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal;
- 4) The person signing this bid or proposal certifies that he has fully informed himself regarding the accuracy of the statements contained in this certification, and under the penalties being applicable to the Bidder as well as to the person signing in its behalf.

Not a negotiable term. Failure to agree will render your proposal non-responsive and it will not be considered.

**4** **CONFLICT OF INTEREST QUESTIONNAIRE - FORM CIQ - Do you have any CONFLICT OF INTEREST TO REPORT OR DISCLOSE under this statutory requirement?**

**6** Do you have any CONFLICT OF INTEREST TO REPORT OR DISCLOSE under this statutory requirement? YES or NO

If you have a conflict of interest as described in this form or the Local Government Code Chapter 176, cited therein- you are required to complete and file with TIPS. The Form CIQ is one of the attachments to this solicitation.

There is an optional upload for this form provided if you have a conflict and must file the form

**4** **Filing of Form CIQ**

**7** If yes (above), have you filed a form CIQ by uploading the form to this RFP as directed above?

**4** **Regulatory Standing**

**8** I certify to TIPS for the proposal attached that my company is in good standing with all governmental agencies Federal or state that regulate any part of our business operations. If not, please explain in the next attribute question.

**4** **Regulatory Standing**

**9** Regulatory Standing explanation of no answer on previous question.

**Antitrust Certification Statements (Tex. Government Code § 2155.005)**

By submission of this bid or proposal, the Bidder certifies that:

I affirm under penalty of perjury of the laws of the State of Texas that:

- (1) I am duly authorized to execute this contract on my own behalf or on behalf of the company, corporation, firm, partnership or individual (Company) listed below;
- (2) In connection with this bid, neither I nor any representative of the Company has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15;
- (3) In connection with this bid, neither I nor any representative of the Company has violated any federal antitrust law;
- (4) Neither I nor any representative of the Company has directly or indirectly communicated any of the contents of this bid to a competitor of the Company or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Company.

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## Suspension or Debarment Instructions

Instructions for Certification:

1. By answering yes to the next Attribute question below, the vendor and prospective lower tier participant is providing the certification set out herein in accordance with these instructions.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and / or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms “covered transaction,” “debarred,” “suspended,” “ineligible,” “lower tier covered transaction,” “participants,” “person,” “primary covered transaction,” “principal,” “proposal” and “voluntarily excluded,” as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this form that it will include this clause titled “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction” without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and / or debarment.

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## Suspension or Debarment Certification

By answering yes, you certify that no federal suspension or debarment is in place, which would preclude receiving a federally funded contract as described above.

Yes

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### **Non-Discrimination Statement and Certification**

In accordance with Federal civil rights law, all U.S. Departments, including the U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

(Title VI of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975; Title 7 CFR Parts 15, 15a, and 15b; the Americans with Disabilities Act; and FNS Instruction 113-1, Civil Rights Compliance and Enforcement – Nutrition Programs and Activities)

All U.S. Departments, including the USDA are equal opportunity provider, employer, and lender.

Not a negotiable term. Failure to agree by answering YES will render your proposal non-responsive and it will not be considered. I certify that in the performance of a contract with TIPS or its members, that our company will conform to the foregoing anti-discrimination statement and comply with the cited and all other applicable laws and regulations.

Yes, I certify (Yes)

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### **2 CFR PART 200 Contract Provisions Explanation**

Required Federal contract provisions of Federal Regulations for Contracts for contracts with ESC Region 8 and TIPS Members:

The following provisions are required to be in place and agreed if the procurement is funded in any part with federal funds.

The ESC Region 8 and TIPS Members are the subgrantee or Subrecipient by definition. Most of the provisions are located in 2 CFR PART 200 - Appendix II to Part 200—Contract Provisions for Non-Federal Entity Contracts Under Federal Awards at 2 CFR PART 200. Others are included within 2 CFR part 200 et al.

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

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**2 CFR PART 200 Contracts**

Contracts for more than the simplified acquisition threshold currently set at \$250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Notice: Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members reserves all rights and privileges under the applicable laws and regulations with respect to this procurement in the event of breach of contract by either party.

Does vendor agree?

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**2 CFR PART 200 Termination**

Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members reserves the right to terminate any agreement in excess of \$10,000 resulting from this procurement process for cause after giving the vendor an appropriate opportunity and up to 30 days, to cure the causal breach of terms and conditions. ESC Region 8 and TIPS Members reserves the right to terminate any agreement in excess of \$10,000 resulting from this procurement process for convenience with 30 days notice in writing to the awarded vendor. The vendor would be compensated for work performed and goods procured as of the termination date if for convenience of the ESC Region 8 and TIPS Members. Any award under this procurement process is not exclusive and the ESC Region 8 and TIPS reserves the right to purchase goods and services from other vendors when it is in the best interest of the ESC Region 8 and TIPS.

Does vendor agree?

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**2 CFR PART 200 Clean Air Act**

Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Pursuant to the Clean Air Act, et al above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members requires that the proposer certify that during the term of an award by the ESC Region 8 and TIPS Members resulting from this procurement process the vendor agrees to comply with all of the above regulations, including all of the terms listed and referenced therein.

Does vendor agree?

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**2 CFR PART 200 Byrd Anti-Lobbying Amendment**

Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members requires the proposer certify that during the term and during the life of any contract with ESC Region 8 and TIPS Members resulting from this procurement process the vendor certifies to the terms included or referenced herein.

Does vendor agree?

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**2 CFR PART 200 Federal Rule**

Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$250,000)

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, ESC Region 8 and TIPS Members requires the proposer certify that in performance of the contracts, subcontracts, and subgrants of amounts in excess of \$250,000, the vendor will be in compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15).

Does vendor certify that it is in compliance with the Clean Air Act?

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**2 CFR PART 200 Procurement of Recovered Materials**

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Does vendor certify that it is in compliance with the Solid Waste Disposal Act as described above?

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**1** **2 CFR PART 200 Rights to Inventions**

If the Federal award meets the definition of “funding agreement” under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

Pursuant to the above, when the foregoing applies to ESC Region 8 and TIPS Members, Vendor certifies that during the term of an award resulting from this procurement process, Vendor agrees to comply with all applicable requirements as referenced in the Federal rule above.

Does vendor agree?

**6**  
**2** **2 CFR PART 200 Domestic Preferences for Procurements**

As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award. For purposes of 2 CFR Part 200.322, “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States. Moreover, for purposes of 2 CFR Part 200.322, “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum, plastics and polymer-based products such as polyvinyl chloride pipe, aggregates such as concrete, glass, including optical fiber, and lumber.

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, Vendor certifies that to the greatest extent practicable Vendor will provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products).

Does vendor agree?

**6**  
**3** **2 CFR PART 200 Ban on Foreign Telecommunications**

Federal grant funds may not be used to purchase equipment, services, or systems that use “covered telecommunications” equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. “Covered telecommunications” means purchases from Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities), and video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

Pursuant to the above, when federal funds are expended by ESC Region 8 and TIPS Members, Vendor certifies that Vendor will not purchase equipment, services, or systems that use “covered telecommunications”, as defined by 2 CFR §200.216 equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

Does vendor agree?

**6 4 2 CFR PART 200 Contract Cost & Price**

For contracts more than the simplified acquisition threshold currently set at \$250,000, a TIPS Member may, in very rare circumstances, be required to negotiate profit as a separate element of the price pursuant to 2 C.F.R. 200.324(b). Under those circumstances, Vendor agrees to provide information and negotiate with the TIPS Member regarding profit as a separate element of the price. However, Vendor certifies that the total price charged by the Vendor shall not exceed the Vendor's TIPS pricing and pricing terms proposed.

Does Vendor Agree?

**6 5 FEMA Fund Certifications**

Submission of this proposal is Vendor's certification that Vendor agrees to this term. Vendor certifies that **IF and when** Vendor accepts a TIPS purchase paid for in full or part with FEMA funds, Vendor certifies that:

(1) Vendor agrees to provide the TIPS Member, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to and rights to reproduce any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions. The Vendor agrees to provide the FEMA Administrator or an authorized representatives access to construction or other work sites pertaining to the work being completed under the contract. Vendor acknowledges and agrees that no language in this contract or the contract with the TIPS Member is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

(2) The Vendor shall not use the Department of Homeland Security's seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

(3) The Vendor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

(4) The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

(5) The Vendor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Vendor's actions pertaining to this contract.

**6 6 Certification of Compliance with the Energy Policy and Conservation Act**

When appropriate and to the extent consistent with the law, Vendor certifies that it will comply with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq; 49 C.F.R. Part 18) and any mandatory standards and policies relating to energy efficiency which are contained in applicable state energy conservation plans issued in compliance with the Act.

Does Vendor agree?

**6**  
**7** **Certification Regarding Lobbying**

Applicable to Grants, Subgrants, Cooperative Agreements, and Contracts Exceeding \$100,000 in Federal Funds

Submission of this certification is a prerequisite for making or entering into this transaction and is imposed by section 1352, Title 31, U.S. Code. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all covered subawards exceeding \$100,000 in Federal funds at all appropriate tiers and that all subrecipients shall certify and disclose accordingly.

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**8** **If you answered "I HAVE lobbied" to the above Attribute Question**

If you answered "I HAVE lobbied" to the above Attribute question, you must download the Lobbying Report "Standard From LLL, disclosure Form to Report Lobbying" which includes instruction on completing the form, complete and submit it in the Response Attachments section as a report of the lobbying activities you performed or paid others to perform.

**6**  
**9** **Subcontracting with Small and Minority Businesses, Women's Business Enterprises, and Labor Surplus Area Firms.**

Do you ever anticipate the possibility of subcontracting any of your work under this award if you are successful?

IF NO, DO NOT ANSWER THE NEXT ATTRIBUTE QUESTION. . IF YES, and ONLY IF YES, you must answer the next question YES if you want a TIPS Member to be authorized to spend Federal Grant Funds for Procurement.

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**ONLY IF YES TO THE PREVIOUS QUESTION OR if you ever do subcontract any part of your performance under the TIPS Agreement, do you agree to comply with the following federal requirements?**

ONLY IF YES TO THE PREVIOUS QUESTION OR if you ever do subcontract any part of your performance under the TIPS Agreement,

do you agree to comply with the following federal requirements?

Federal Regulation 2 CFR §200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms. (a)The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce ; and

(6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs(1) through (5) of this section.

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**Indemnification**

The ESC Region 8 and TIPS is a Texas Political Subdivision and a local governmental entity; therefore, is prohibited from

indemnifying third parties pursuant to the Texas Constitution (Article 3, Section 52) except as specifically provided by law or as

ordered by a court of competent jurisdiction. A provision in a contract to indemnify or hold a party harmless is a promise to pay for

any expenses the indemnified party incurs, if a specified event occurs, such as breaching the terms of the contract or negligently

performing duties under the contract. Article III, Section 49 of the Texas Constitution states that "no debt shall be created by or on

behalf of the State ... " The Attorney General has counseled that a contractually imposed obligation of indemnity creates a "debt" in

the constitutional sense. Tex. Att'y Gen. Op. No. MW-475 (1982). Contract clauses which require the System or institutions to

indemnify must be deleted or qualified with "to the extent permitted by the Constitution and Laws of the State of Texas." Liquidated

damages, attorney's fees, waiver of vendor's liability, and waiver of statutes of limitations clauses should also be deleted or qualified

with "to the extent permitted by the Constitution and laws of State of Texas."

Not a negotiable term. Failure to agree will render your proposal non-responsive and it will not be considered. Do you agree

to these terms?

Yes, I Agree (Yes)

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**Remedies**

The parties shall be entitled to exercise any right or remedy available to it either at law or in equity, subject to the choice of law, venue and service of process clauses limitations agreed herein. Nothing in this agreement shall commit the TIPS to an arbitration resolution of any disagreement under any circumstances. Any Claim arising out of or related to the Contract, except for those specifically waived under the terms of the Contract, may, after denial of the Board of Directors, be subject to mediation at the request of either party. Any issues not resolved hereunder MAY be referred to non-binding mediation to be conducted by a mutually agreed upon mediator as a prerequisite to the filing of any lawsuit over such issue(s). The parties shall share the mediator's fee and any associated filing fee equally. Mediation shall be held in Camp or Titus County, Texas. Agreements reached in mediation shall be reduced to writing, and will be subject to the approval by the District's Board of Directors, signed by the Parties if approved by the Board of Directors, and, if signed, shall thereafter be enforceable as provided by the laws of the State of Texas.

Do you agree to these terms?

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**Remedies Explanation of No Answer**

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**Choice of Law**

The agreement between the Vendor and TIPS/ESC Region 8 and any addenda or other additions resulting from this procurement process, however described, shall be governed by, construed and enforced in accordance with the laws of the State of Texas, regardless of any conflict of laws principles. THIS DOES NOT APPLY to a vendor's agreement entered into with a TIPS Member, as the Member may be located outside Texas.

Do you agree to these terms?

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**Venue, Jurisdiction and Service of Process**

Any proceeding, involving Region 8 ESC or TIPS, arising out of or relating to this procurement process or any contract issued by TIPS resulting from or any contemplated transaction shall be brought in a court of competent jurisdiction in Camp County, Texas and each of the parties irrevocably submits to the exclusive jurisdiction of said court in any such proceeding, waives any objection it may now or hereafter have to venue or to convenience of forum, agrees that all claims in respect of the Proceeding shall be heard and determined only in any such court, and agrees not to bring any proceeding arising out of or relating to this procurement process or any contract resulting from or any contemplated transaction in any other court. The parties agree that either or both of them may file a copy of this paragraph with any court as written evidence of the knowing, voluntary and freely bargained for agreement between the parties irrevocably to waive any objections to venue or to convenience of forum. Process in any Proceeding referred to in the first sentence of this Section may be served on any party anywhere in the world. Any dispute resolution process other than litigation shall have venue in Camp County or Titus County Texas.

Do you agree to these terms?

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6** **Infringement(s)**

The successful vendor will be expected to indemnify and hold harmless the TIPS and its employees, officers, agents, representatives, contractors, assignees and designees from any and all third party claims and judgments involving infringement of patent, copyright, trade secrets, trade or service marks, and any other intellectual or intangible property rights attributed to or claims based on the Vendor's proposal or Vendor's performance of contracts awarded and approved.

Do you agree to these terms?

Yes, I Agree

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7** **Infringement(s) Explanation of No Answer**

*No response*

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8** **Contract Governance**

Any contract made or entered into by the TIPS is subject to and is to be governed by Section 271.151 et seq, Tex Loc Gov't Code. Otherwise, TIPS does not waive its governmental immunities from suit or liability except to the extent expressly waived by other applicable laws in clear and unambiguous language.

Yes, I Agree (Yes)

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9** **Payment Terms and Funding Out Clause**

Payment Terms:

TIPS or TIPS Members shall not be liable for interest or late payment fees on past-due balances at a rate higher than permitted by the laws or regulations of the jurisdiction of the TIPS Member.

Funding Out Clause:

Vendor agrees to abide by the laws and regulations, including Texas Local Government Code § 271.903, or any statutory or regulatory limitations of the jurisdiction of any TIPS Member which governs contracts entered into by the Vendor and TIPS or a TIPS Member that requires all contracts approved by TIPS or a TIPS Member are subject to the budgeting and appropriation of currently available funds by the entity or its governing body.

See statute(s) for specifics or consult your legal counsel.

Not a negotiable term. Failure to agree will render your proposal non-responsive and it will not be considered.

Do you agree to these terms?

Yes, I Agree (Yes)

## 80 Insurance and Fingerprint Requirements Information

### Insurance

If applicable and your staff will be on TIPS member premises for delivery, training or installation etc. and/or with an automobile, you must carry automobile insurance as required by law. You may be asked to provide proof of insurance.

### Fingerprint

It is possible that a vendor may be subject to Chapter 22 of the Texas Education Code. The Texas Education Code, Chapter 22, Section 22.0834 & 22.08341. Statutory language may be found at: <http://www.statutes.legis.state.tx.us/>

If the vendor has staff that meet both of these criterion:

- (1) will have continuing duties related to the contracted services; and
- (2) has or will have direct contact with students

Then you have "covered" employees for purposes of completing the attached form.

TIPS recommends all vendors consult their legal counsel for guidance in compliance with this law. If you have questions on how to comply, see below. If you have questions on compliance with this code section, contact the Texas Department of Public Safety Non-Criminal Justice Unit, Access and Dissemination Bureau, FAST-FACT at [NCJU@txdps.state.tx.us](mailto:NCJU@txdps.state.tx.us) and you should send an email identifying you as a contractor to a Texas Independent School District or ESC Region 8 and TIPS. Texas DPS phone number is (512) 424-2474.

See form in the next attribute to complete entitled:  
Texas Education Code Chapter 22 Contractor Certification for Contractor Employees

**Texas Education Code Chapter 22 Contractor Certification for Contractor Employees**

Introduction: Texas Education Code Chapter 22 requires entities that contract with school districts to provide services to obtain criminal history record information regarding covered employees. Contractors must certify to the district that they have complied. Covered employees with disqualifying criminal histories are prohibited from serving at a school district.

Definitions: Covered employees: Employees of a contractor or subcontractor who have or will have continuing duties related to the service to be performed at the District and have or will have direct contact with students. The District will be the final arbiter of what constitutes direct contact with students. Disqualifying criminal history: Any conviction or other criminal history information designated by the District, or one of the following offenses, if at the time of the offense, the victim was under 18 or enrolled in a public school:

(a) a felony offense under Title 5, Texas Penal Code; (b) an offense for which a defendant is required to register as a sex offender under Chapter 62, Texas Code of Criminal Procedure; or (c) an equivalent offense under federal law or the laws of another state.

I certify that:

**NONE (Section A)** of the employees of Contractor and any subcontractors are covered employees, as defined above. If this box is checked, I further certify that Contractor has taken precautions or imposed conditions to ensure that the employees of Contractor and any subcontractor will not become covered employees. Contractor will maintain these precautions or conditions throughout the time the contracted services are provided.

**OR**

**SOME (Section B)** or all of the employees of Contractor and any subcontractor are covered employees. If this box is checked, I further certify that:

(1) Contractor has obtained all required criminal history record information regarding its covered employees. None of the covered employees has a disqualifying criminal history.

(2) If Contractor receives information that a covered employee subsequently has a reported criminal history, Contractor will immediately remove the covered employee from contract duties and notify the District in writing within 3 business days.

(3) Upon request, Contractor will provide the District with the name and any other requested information of covered employees so that the District may obtain criminal history record information on the covered employees.

(4) If the District objects to the assignment of a covered employee on the basis of the covered employee's criminal history record information, Contractor agrees to discontinue using that covered employee to provide services at the District.

Noncompliance or misrepresentation regarding this certification may be grounds for contract termination.

None

**8** **Texas Business and Commerce Code § 272 Requirements as of 9-1-2017**

**2** SB 807 prohibits construction contracts to have provisions requiring the contract to be subject to the laws of another state, to be required to litigate the contract in another state, or to require arbitration in another state. A contract with such provisions is voidable. Under this new statute, a "construction contract" includes contracts, subcontracts, or agreements with (among others) architects, engineers, contractors, construction managers, equipment lessors, or materials suppliers. "Construction contracts" are for the design, construction, alteration, renovation, remodeling, or repair of any building or improvement to real property, or for furnishing materials or equipment for the project. The term also includes moving, demolition, or excavation. BY RESPONDING TO THIS SOLICITATION, AND WHEN APPLICABLE, THE PROPOSER AGREES TO COMPLY WITH THE TEXAS BUSINESS AND COMMERCE CODE § 272 WHEN EXECUTING CONTRACTS WITH TIPS MEMBERS THAT ARE TEXAS GOVERNMENT ENTITIES.

**8** **Texas Government Code 2270 & 2271 Verification Form**

**3** Texas Government Code 2270 & 2271 Verification Form

If (a) Vendor is not a sole proprietorship; (b) Vendor has ten (10) or more full-time employees; and (c) this Agreement has a value of \$100,000 or more, the following certification shall apply; otherwise, this certification is not required. Pursuant to Chapter 2271 of the Texas Government Code, the Vendor hereby certifies and verifies that neither the Vendor, nor any affiliate, subsidiary, or parent company of the Vendor, if any (the "Vendor Companies"), boycotts Israel, and the Vendor agrees that the Vendor and Vendor Companies will not boycott Israel during the term of this Agreement. For purposes of this Agreement, the term "boycott" shall mean and include refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

Our entity further certifies that it is is not listed on and we do not do business with companies prohibited by Texas Government Code 2270 or that are on the Texas Comptroller of Public Accounts list of Designated Foreign Terrorists Organizations per Texas Gov't Code 2270.0153 found at <https://comptroller.texas.gov/purchasing/docs/foreign-terrorist.pdf>

I swear and affirm that the above is true and correct.

**8** **Logos and other company marks**

**4** Please upload your company logo to be added to your individual profile page on the TIPS website. If any particular specifications are required for use of your company logo, please upload that information under the "Logo and Other Company Marks" section under the "Response Attachment" tab. Preferred Logo Format: 300 x 225 px - .png, .eps, .jpeg preferred

Potential uses of company logo:

- \* Your Vendor Profile Page of TIPS website
- \* Potentially on TIPS website scroll bar for Top Performing Vendors
- \* TIPS Quarterly eNewsletter sent to TIPS Members
- \* Co-branding Flyers and or email blasts to our TIPS Members (Permission and approval will be obtained before publishing)

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**Solicitation Deviation/Compliance**

Does the vendor agree with the General Conditions Standard Terms and Conditions or Item Specifications listed in this proposal invitation?

Yes

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**Solicitation Exceptions/Deviations Explanation**

If the bidder intends to deviate from the General Conditions Standard Terms and Conditions or Item Specifications listed in this proposal invitation, all such deviations must be listed on this attribute, with complete and detailed conditions and information included or attached.

TIPS will consider any deviations in its proposal award decisions, and TIPS reserves the right to accept or reject any bid based upon any deviations indicated below or in any attachments or inclusions.

In the absence of any deviation entry on this attribute, the proposer assures TIPS of their full compliance with the Standard Terms and Conditions, Item Specifications, and all other information contained in this Solicitation.

No response

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**Agreement Deviation/Compliance**

Does the vendor agree with the language in the Vendor Agreement?

Yes

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**Agreement Exceptions/Deviations Explanation**

If the proposing Vendor desires to deviate from the Vendor Agreement language, all such deviations must be listed on this attribute, with complete and detailed conditions and information included. TIPS will consider any deviations in its proposal award decisions, and TIPS reserves the right to accept or reject any proposal based upon any deviations indicated below. In the absence of any deviation entry on this attribute, the proposer assures TIPS of their full compliance with the Vendor Agreement.

No response

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**Felony Conviction Notice**

Texas Education Code, Section 44.034, Notification of Criminal History, Subsection (a), states "a person or business entity that enters into a contract with a school district must give advance notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony." Subsection (b) states "a school district may terminate a contract with a person or business entity if the district determines that the person or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The district must compensate the person or business entity for services performed before the termination of the contract." (c) This section does not apply to a publicly held corporation. The person completing this proposal certifies that they are authorized to provide the answer to this question.

Select A., B. or C.

A. My firm is a publicly held corporation; therefore, this reporting requirement is not applicable.

OR B. My firm is not owned nor operated by anyone who has been convicted of a felony, OR

C. My firm is owned or operated by the following individual(s) who has/have been convicted of a felony. (if you answer C below, you are required to provide information in the next attribute.

B. Firm not owned nor operated by felon; per above

**90** **If you answered C. My Firm is owned or operated by a felon to the previous question, you are REQUIRED TO ANSWER THE FOLLOWING QUESTIONS.**

If you answered C. My Firm is owned or operated by a felon to the previous question, you must provide the following information.

1. Name of Felon(s)
2. The named person's role in the firm, and
3. Details of Conviction(s).

**91** **Required Confidentiality Claim Form**

Required Confidentiality Claim Form

This completed form is required by TIPS. By submitting a response to this solicitation you agree to download from the "Attachments" section, complete according to the instructions on the form, then upload the completed form, with any confidential attachments, if applicable, to the "Response Attachments" section titled "Confidentiality Form" in order to provide to TIPS the completed form titled, "CONFIDENTIALITY CLAIM FORM". **THIS REQUIRED PROCESS IS THE ONLY WAY TO DEEM PROPOSAL DOCUMENTATION CONFIDENTIAL ANY OTHER CONFIDENTIAL DESIGNATION WILL BE DISREGARDED UNLESS THE DOCUMENT IS IDENTIFIED BY AND ATTACHED TO THE REQUIRED FORM.** By completing this process, you provide us with the information we require to comply with the open record laws of the State of Texas as they may apply to your proposal submission. If you do not provide the form with your proposal, an award will not be made if your proposal is qualified for an award, until TIPS has an accurate, completed form from you.

Read the form carefully before completing and if you have any questions, email bids@tips-usa.com.

**92** **Member Access to Vendor Proposal**

Notwithstanding any other information provided in this solicitation or Vendor designation of certain documentation as confidential or proprietary, Vendor's acceptance of this TIPS Contract constitutes Vendor's consent to the disclosure of Vendor's comprehensive proposal, including any information deemed confidential or proprietary, **to TIPS Members**. The proposing Vendor agrees that TIPS shall not be responsible or liable for any use or distribution of information or documentation by TIPS Members or any other party. By submitting this proposal, Vendor certifies the foregoing.

**93** **Choice of Law clauses with TIPS Members**

If the vendor is awarded a contract with TIPS under this solicitation, the vendor agrees to make any Choice of Law clauses in any contract or agreement entered into between the awarded vendor and with a TIPS member entity to read as follows: "Choice of law shall be the laws of the state where the customer resides" or words to that effect.

**94** **Venue of dispute resolution with a TIPS Member**

In the event of litigation or use of any dispute resolution model when resolving disputes with a TIPS member entity as a result of a transaction between the vendor and TIPS or the TIPS member entity, the Venue for any litigation or other agreed upon model shall be in the state and county where the customer resides unless otherwise agreed by the parties at the time the dispute resolution model is decided by the parties.

**95** **Automatic renewal of contracts or agreements with TIPS or a TIPS member entity**

This clause **DOES NOT** prohibit multiyear contracts or agreements with TIPS member entities. Because TIPS and TIPS members are governmental entities subject to laws that control appropriations of funds during their fiscal years for contracts and agreements to provide goods and services, does the Vendor agree to limit any automatic renewal clauses of a contract or agreement executed as a result of this TIPS solicitation award to not longer than "month to month" and at the TIPS contracted rate.

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6** **Indemnity Limitation with TIPS Members**

Texas and other states restrict by law or state Constitution the ability of a governmental entity to indemnify others. TIPS requires that any contract entered into between a vendor and TIPS or a TIPS Member as a result of an award under this Solicitation limit the requirement that the Customer indemnify the Vendor by either eliminating any such indemnity requirement clauses in any agreements, contracts or other binding documents **OR** by prefacing all indemnity clauses required of TIPS or the TIPS Member entity with the following: "To the extent permitted by the laws or the Constitution of the state where the customer resides, ".

**Agreement is a required condition to award of a contract resulting from this Solicitation.**

**9  
7** **Arbitration Clauses**

Except for certain circumstances, TIPS forbids a mandatory arbitration clause in any contract or agreement entered into between the awarded vendor with TIPS or a TIPS member entity. Does the vendor agree to exclude any arbitration requirement in any contracts or agreement entered into between TIPS or a TIPS member entity through an awarded contract with TIPS?

**9  
8** **Required Vendor Sales Reporting**

By responding to this Solicitation, you agree to report to TIPS all sales made under any awarded Agreement with TIPS. Vendor is required to report all sales under the TIPS contract to TIPS. If the TIPS Member entity requesting a price from the awarded Vendor requests the TIPS contract, Vendor must include the TIPS Contract number on any communications with the TIPS Member entity. If awarded, you will be provided access to the Vendor Portal. To report sales, login to the TIPS Vendor Portal and click on the PO's and Payments tab. Pages 3-7 of the **Vendor Portal User Guide** will walk you through the process of reporting sales to TIPS. Please refer to the TIPS **Accounting FAQ's** for more information about reporting sales and if you have further questions, contact the Accounting Team at [accounting@tips-usa.com](mailto:accounting@tips-usa.com). The Vendor or vendor assigned dealers are responsible for keeping record of all sales that go through the TIPS Agreement and submitting same to TIPS.

**9  
9** **Upload of Current W-9 Required**

Please note that you are required by TIPS to upload a current W-9 Internal Revenue Service (IRS) Tax Form for your entity. This form will be utilized by TIPS to properly identify your entity.

**1  
0  
0** **CERTIFICATION REGARDING BOYCOTTING CERTAIN ENERGY COMPANIES (Texas law as of September 1, 2021)**

**By submitting a proposal to this Solicitation, you certify that you agree, when it is applicable, to the following required by Texas law as of September 1, 2021:**

If (a) company is not a sole proprietorship; (b) company has ten (10) or more full-time employees; and (c) this contract has a value of \$100,000 or more that is to be paid wholly or partly from public funds, the following certification shall apply; otherwise, this certification is not required. Pursuant to Tex. Gov't Code Ch. 2274 of SB 13 (87<sup>th</sup> session), the company hereby certifies and verifies that the company, or any wholly owned subsidiary, majority-owned subsidiary, parent company, or affiliate of these entities or business associations, if any, does not boycott energy companies and will not boycott energy companies during the term of the contract. For purposes of this contract, the term "company" shall mean an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or limited liability company, that exists to make a profit. The term "boycott energy company" shall mean "without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company (a) engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law, or (b) does business with a company described by paragraph (a)." See Tex. Gov't Code § 809.001(1).

**101 CERTIFICATION PROHIBITING DISCRIMINATION AGAINST FIREARM AND AMMUNITION INDUSTRIES (Texas law as of September 1, 2021)**

**By submitting a proposal to this Solicitation, you certify that you agree, when it is applicable, to the following required by Texas law as of September 1, 2021:**

If (a) company is not a sole proprietorship; (b) company has at least ten (10) full-time employees; (c) this contract has a value of at least \$100,000 that is paid wholly or partly from public funds; (d) the contract is not excepted under Tex. Gov't Code § 2274.003 of SB 19 (87<sup>th</sup> leg.); and (e) governmental entity has determined that company is not a sole-source provider or governmental entity has not received any bids from a company that is able to provide this written verification, the following certification shall apply; otherwise, this certification is not required.

Pursuant to Tex. Gov't Code Ch. 2274 of SB 19 (87<sup>th</sup> session), the company hereby certifies and verifies that the company, or association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or limited liability company, including a wholly owned subsidiary, majority-owned subsidiary parent company, or affiliate of these entities or associations, that exists to make a profit, does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this contract against a firearm entity or firearm trade association. For purposes of this contract, "discriminate against a firearm entity or firearm trade association" shall mean, with respect to the entity or association, to: "(1) refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association; (2) refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or (3) terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association. See Tex. Gov't Code § 2274.001(3) of SB 19. "Discrimination against a firearm entity or firearm trade association" does not include: "(1) the established policies of a merchant, retail seller, or platform that restrict or prohibit the listing or selling of ammunition, firearms, or firearm accessories; and (2) a company's refusal to engage in the trade of any goods or services, decision to refrain from continuing an existing business relationship, or decision to terminate an existing business relationship to comply with federal, state, or local law, policy, or regulations or a directive by a regulatory agency, or for any traditional business reason that is specific to the customer or potential customer and not based solely on an entity's or association's status as a firearm entity or firearm trade association." See Tex. Gov't Code § 2274.001(3) of SB 19.

**102 CERTIFICATION REGARDING CERTAIN FOREIGN-OWNED COMPANIES IN CONNECTION WITH CRITICAL INFRASTRUCTURE (Texas law as of September 1, 2021)**

**By submitting a proposal to this Solicitation, you certify that you agree to the following required by Texas law as of September 1, 2021:**

Proposing Company is prohibited from entering into a contract or other agreement relating to critical infrastructure that would grant to the company direct or remote access to or control of critical infrastructure in this state, excluding access specifically allowed by the Proposing Company for product warranty and support purposes. Company, certifies that neither it nor its parent company nor any affiliate of company or its parent company, is (1) owned by or the majority of stock or other ownership interest of the company is held or controlled by individuals who are citizens of China, Iran, North Korea, Russia, or a designated country; (2) a company or other entity, including governmental entity, that is owned or controlled by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or a designated country; or (3) headquartered in China, Iran, North Korea, Russia, or a designated country. For purposes of this contract, "critical infrastructure" means "a communication infrastructure system, cybersecurity system, electric grid, hazardous waste treatment system, or water treatment facility." See Tex. Gov't Code § 2274.0101(2) of SB 1226 (87<sup>th</sup> leg.). The company verifies and certifies that company will not grant direct or remote access to or control of critical infrastructure, except for product warranty and support purposes, to prohibited individuals, companies, or entities, including governmental entities, owned, controlled, or headquartered in China, Iran, North Korea, Russia, or a designated country, as determined by the Governor.

**103 Acknowledgement**

By submitting this proposal, Vendor certifies that it has read, examined, and understands all portions of this solicitation including but not limited to all attribute questions, attachments, solicitation documents, bid notes, and the Vendor Agreement(s). Vendor certifies that, if found to be necessary by the proposing vendor, vendor has sought the advice of counsel in understanding all portions of the solicitation.

## **ADDENDUM NO. 1 TIPS 220105 TECHNOLOGY SOLUTIONS, PRODUCTS AND SERVICES**

This Addendum #1 ***does not*** require action from responding Vendors and ***does not*** require resubmission for Vendors who have already submitted. It is only to correct a misstatement originally included in Page 7 of the solicitation attachment entitled "220105 RFP Specifications." The original Page 7 of the solicitation attachment entitled "220105 RFP Specifications" mistakenly stated at the top of the page that, "This solicitation is seeking providers for: Safety Equipment, Supplies and Services." This Addendum No. 1 corrects it to properly state, "This solicitation is seeking providers for: Technology Solutions, Products and Services."

**TIPS RFP 220105 Technology Solutions, Products and Services**

**REFERENCES**

Please provide three (3) references from three different entities, preferably from school districts or other governmental entities who have used your services in the last three years. Additional references may be required. DO NOT INCLUDE TIPS EMPLOYEES AS A REFERENCE.

Verify your references emails are deliverable and that they agree to provide a reference. Failure to do this may delay the evaluation process.

You may provide more than three (3) references.

Entity Name	Contact Person	<b>VALID EMAIL IS REQUIRED</b>	Phone
City of Dallas	Srinivasa Veeramallu	s.veeramallu@dallascityhall.com	214-671-9959
City of Dallas	Alyssa Callin	alyssa.callin@dallascityhall.com	469-265-5323
City of Chattanooga	Paul Jones	pjones@chattanooga.gov	423-643-5950
City of Vista	Jason Rivera	jrivera@ci.vista.ca.us	(760) 639-6116
City of Hot Springs	Charlie Bocksnick	cbocksnick@cityhs.net	(501) 321-6941
Hexagon US Federal	Sherry Ruth	sherry.ruth@hexagonusfederal.com	(256) 799-6357
Utilities Board - City of Sylacauga	Reay Culp	rculp@sylacauga.net	256) 267-0002
City of Boston	Bill Regens	<a href="mailto:bregens@pineridgetech.com">bregens@pineridgetech.com</a>	(781) 820-0241
City of Ann Arbor	Robert Deering	bdeering@a2gov.org	(734) 794-6558



**Required Confidential Information Status Form**

K-USA LLC-dba DYMEC

Name of company

Tom West, President

Printed Name and Title of Authorized Company Officer declaring below the confidential status of material

1107 SE Willow PI Blue Springs MO 64014 8162141946

Address City State ZIP Phone

**ALL VENDORS MUST COMPLETE THE ABOVE SECTION**

CONFIDENTIAL INFORMATION SUBMITTED IN RESPONSE TO COMPETITIVE PROCUREMENT REQUESTS OF EDUCATION SERVICE CENTER REGION 8 AND TIPS (ESC8) IS GOVERNED BY TEXAS GOVERNMENT CODE, CHAPTER 552

If you consider any portion of your proposal to be confidential and not subject to public disclosure pursuant to Chapter 552 Texas Gov't Code or other law(s), you must attach a copy of all claimed confidential materials to this COMPLETED form, name the combined PDF documents "CONFIDENTIAL", and upload the combined, confidential documents with your proposal submission. If a document is not attached, it will not be considered confidential. The copy uploaded will be the sole indicator of which material in your proposal, if any, you deem confidential in the event TIPS/ESC 8 receives a Public Information Request. If ESC 8 receives a request, any responsive documentation not deemed confidential by you in this manner will be automatically released. For documents deemed confidential by you in this manner, ESC8 and TIPS will follow procedures of controlling statute(s) regarding any claim of confidentiality and shall not be liable for any release of information required by law, including Attorney General determination. Notwithstanding any other information provided in this solicitation or Vendor designation of certain documentation as confidential or proprietary, Vendor's acceptance of this TIPS Vendor Agreement constitutes Vendor's consent to the disclosure of Vendor's comprehensive proposal, including any information deemed confidential or proprietary, to TIPS Members. The proposing Vendor agrees that TIPS shall not be responsible or liable for any use or distribution of information or documentation by TIPS Members or any other party.

**ALL VENDORS MUST COMPLETE ONE OF THE TWO OPTIONS BELOW**

**OPTION 1:**

I **DO CLAIM** parts of my proposal to be confidential and **DO NOT** desire to expressly waive a claim of confidentiality of all information contained within our response to the solicitation. The attached contains material from our proposal that I classify and deem confidential under Texas Gov't Code Sec. 552 or other law(s) and I invoke my statutory rights to confidential treatment of the enclosed materials.

IF CLAIMING PARTS OF YOUR PROPOSAL CONFIDENTIAL, YOU MUST ATTACH THE SHEETS TO THIS FORM AND LIST THE NUMBER OF TOTAL PAGES THAT ARE CONFIDENTIAL.

**ATTACHED** ARE COPIES OF \_\_\_\_\_ PAGES OF CLAIMED CONFIDENTIAL MATERIAL FROM OUR PROPOSAL THAT WE DEEM TO BE NOT PUBLIC INFORMATION AND WILL DEFEND THAT CLAIM TO THE TEXAS ATTORNEY GENERAL IF REQUESTED WHEN A PUBLIC INFORMATION REQUEST IS MADE FOR OUR PROPOSAL.

Signature \_\_\_\_\_ Date \_\_\_\_\_

OR

**OPTION 2:**

I **DO NOT CLAIM** any of my proposal to be confidential, complete the section below.

**Express Waiver:** I desire to expressly waive any claim of confidentiality as to any and all information contained within our response to the competitive procurement process (e.g. RFP, CSP, Bid, RFQ, etc.) by completing the following and submitting this sheet with our response to Education Service Center Region 8 and TIPS.

Signature Tom West Date 16 Feb 2022



EMAIL: [Sales@DYMEC.com](mailto:Sales@DYMEC.com)  
Telephone: +1 (816) 988-7861  
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Version March/2020

[www.DYMEC.com](http://www.DYMEC.com)



## Industrial Ethernet Switches Selection Guide

*DYMEC - American Industrial Network Solutions*



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## 02

### Applications

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#### 3170 ITS Traffic Switch Series

## 03

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# Company Profile

## About Us

### NSA Certified Endpoint and **DYMEC** Service Control

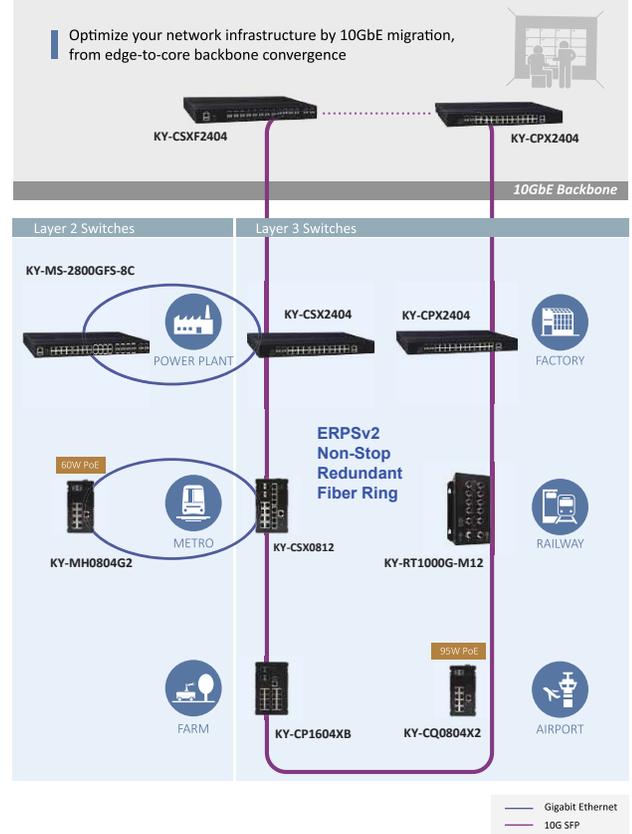
- ❖ NSA Secure Endpoint & Chassis
  - Ability to Shut Down Console Port
  - Ability to Disable Reset Button
  - Ability to Secure and Choose Remote Switch Protocols
    - HTTP
    - HTTPS
    - SSH
    - TELNET

### Available on **DYMEC** Switches & Routers

#### **DYMEC** "SERVICE CONTROL" Solution

- ❖ EASY to Use GUI
- ❖ EASY Verification of Services
- ❖ Secure Chassis
- ❖ Secure Remote & Unmonitored Devices
- ❖ Absolute control of Anyone Cccessing the Device

Optimize your network infrastructure by 10GbE migration, from edge-to-core backbone convergence



# DYMEC Service

Design & Manufacture

### Contact Us

Sales team guides you to the project evaluation process  
+1 (816) 988-7861  
Email: Sales@DYMEC.com



### Engineering

- Cost Analysis
- Marketing & Competition Analysis
- Hardware & Software Customization



### Manufacturing

- ISO9001& 14001 Certified
- In-house Facility
- Cost-Effective



### Quality Control

- IQC
- IPQC UL
- FQC
- OQC



### Service

- Technical Support
- RMA Service

### Security

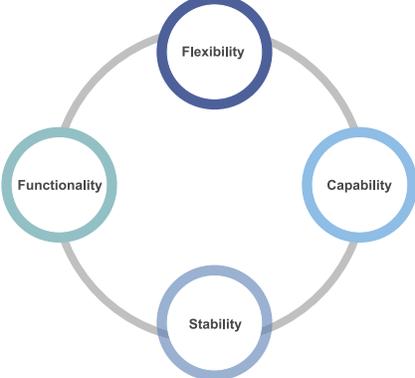
- NSA Secure
- Service Control



### Long-Term Partnership



# Core Value High Quality Hardware & Intelligent Software



01  
ESD level 4 - Contact 8KV, Air 15KV



02  
• High current design for PoE powering  
• Using aluminum heat sink on key components for better heat dissipation



03  
• FCC / CE (EN55032 / 24)  
• CE Industrial (EN61000-6-2 & 4)  
• UL62368 (60950)  
• UL Class 1, Division 2  
• Free Fall / Shock / Vibration



01

Low Latency, LIFO < 5µS for all packet size

02

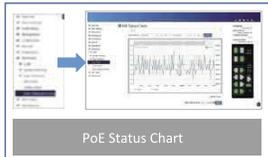
Support HSR / PRP / 802.1CB for seamless redundancy and hardware learning of flow

03

Time aware per-stream IEEE802.1Qci QoS for TSN application



Traffic Chart  
Collecting the Tx / Rx throughput real-time and historic records per port



PoE Status Chart  
Collecting the Voltage and Wattage real-time and historic records per port between PSE and PD



PoE Keep Alive  
The system pings the configured IP address on every ping interval to ensure the PD is connected on the designated port.

## Product Feature Highlight

**3170® Series Managed Switch**  
Layer 2  
Layer 3  
Gigabit  
10 GbE  
PoE+ (IEEE802.3bt) 60 Watt



Industrial Grade  
M12 / EN50155  
10G Managed PoE  
Layer 2 / Layer 3  
Gigabit Managed PoE  
IEC61850-3



**Industrial Managed Switch**  
Gigabit Ethernet Switch  
10G Ethernet Switch



**Industrial Layer 3 Switch**  
PoE Ethernet Switch  
non-PoE Ethernet Switch

**Industrial PoE Switch**  
IEEE802.3at / IEEE802.3bt  
30W / 60W / 95W



**EN50155 / M12 Port**  
Fastening Cable Connection  
PoE Function  
Layer 2 / Layer 3  
Compact Size



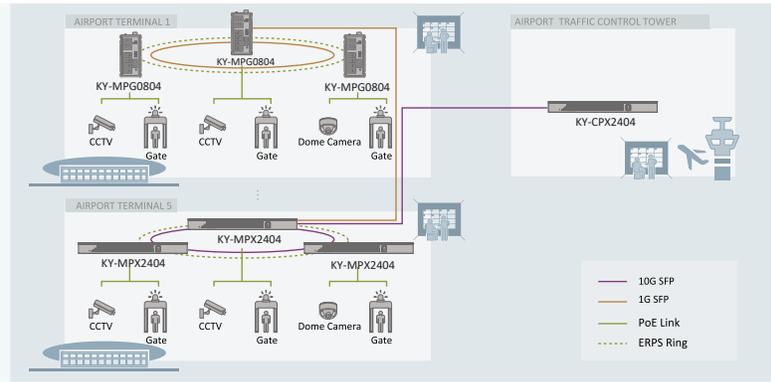
**Industrial Unmanaged Ethernet Switch**  
PoE Ethernet Switch  
Non-PoE Ethernet Switch



**Other Accessories**  
Industrial Media Converter  
Industrial Power Supply  
SFP Module  
M12 Cable & Mounting Kit

# Transportation

## Airport Surveillance



### Application Note

#### Why DYMEC



- Rugged design switches
- Advanced features
- Rapid technical support

We provide Layer 2 & Layer 3 rugged Industrial Ethernet switches with 1 / 10 GbE Solutions, including ERPSv2 Non-Stop Fiber Rings. Reliable Air Traffic Management - that is secure.

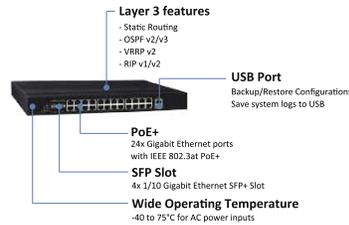


▲ DYMEC Industrial switches support IPv6 and SNMPv3 to enhance your airport network management.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• Gigabit to 10G uplink</li> <li>• 30W/60W/95W full PoE solutions</li> <li>• Layer 2 to Layer 3 management</li> <li>• Graphic chart for real-time PoE delivery and traffic data</li> <li>• Temperature Hardened Switches / -40 ~ 85°C</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> <li>• EN50121-4</li> </ul>	<ul style="list-style-type: none"> <li>• Airport Terminal</li> <li>• Traffic Control</li> <li>• Intersection Traffic</li> <li>• Roadside Surveillance</li> <li>• Electronic Toll Collection</li> </ul>

### Product Spotlight



#### KY-CPX2404

24+4 Port Industrial Managed PoE+ Layer 3 Switch with 10G Uplink

- PoE PD Alive Check Function for PoE Device Power Recycle
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- IGMP Snooping v1/v2/v3, up to 1023 groups
- DHCP Relay Option 82 for policies IP address assignment
- Static Routing, Dynamic Routing (RIP v1/v2, OSPF v2), Routed Redundancy (VRRP v2)



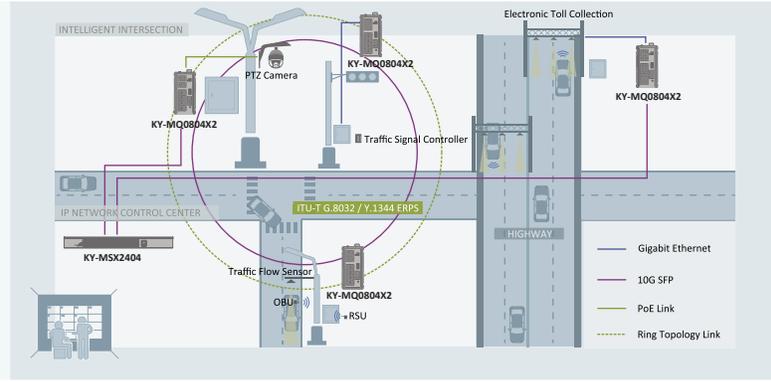
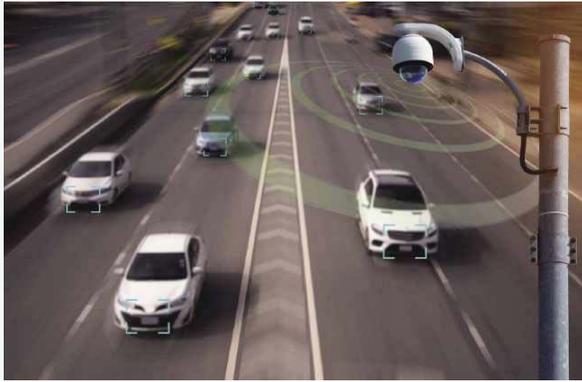
	KY-MPX2404	KY-CP1604XB	KY-CPX2404	KY-MH0804G2	KY-MQ0804G2
GbE	✓	✓	✓	✓	✓
10GbE	✓	✓	✓	✓	✓
PoE	✓	✓	✓	✓ (2 x 60W)	✓ (2 x 95W)
Layer3	✓	✓	✓	✓	✓
Operating Temperature	-40° ~ +85°C				

■ IEEE802.3at 30W PoE+ Solution

■ IEEE802.3bt 60W / 95W PoE+ Solution

# Transportation

## Roadside Surveillance



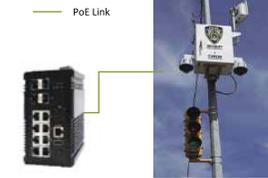
### Application Note

#### Why DYMEC



- Advanced features
- Real-time PoE monitoring
- Easy TX/RX data monitoring

**Our 60 & 95 Watt PoE+ Switches (IEEE802.3bt) with 1 / 10 GbE Up-links provide clean, regulated power, including NSA security for your high capacity & resolution requirements.**



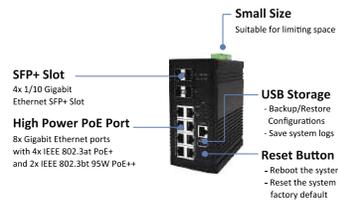
#### 60 Watt PoE+ (IEEE802.3bt) Switch

▲ 60W/95W PoE switches are suitable for HD PTZ Dome Cameras.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• PoE PD Alive Check</li> <li>• Gigabit to 10 Gigabit uplink</li> <li>• 30W/60W/95W full PoE solutions</li> <li>• Layer 2 to Layer 3 management</li> <li>• Temperature Hardened - -40° ~ +85°C</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> <li>• EN50121-4</li> </ul>	<ul style="list-style-type: none"> <li>• Highway</li> <li>• Roadside</li> <li>• Traffic Signal</li> <li>• Toll &amp; Tunnel</li> <li>• Air Traffic</li> </ul>

### Product Spotlight



#### KY-MQ0804X2

8+4 Port Industrial Managed PoE++ Ethernet Switch with 10G Uplink

- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- IGMP Snooping v1/v2/v3, up to 1023 groups
- PoE Chart Status to monitor real-time voltage and wattage and collect records.
- PoE PD Alive Check Function for PoE Device Power Recycle



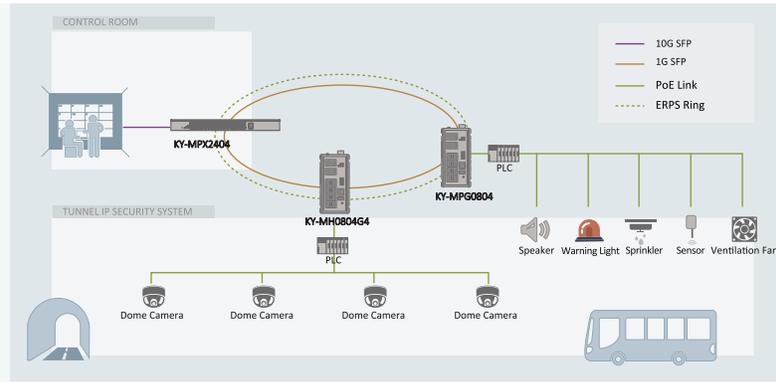
	KY-MTG1002	KY-CPX2404	KY-MH0804G2	KY-MH0804X2	KY-MQ0804X2
GbE	✓	✓	✓	✓	✓
10GbE		✓		✓	✓
Layer 3		✓		✓	✓
PoE Booster	✓				
Operating Temperature	-40° ~ +85°C				

■ IEEE802.3at 30W PoE+ Solution

■ IEEE802.3bt 60W/95W PoE++ Solution

# Transportation

## Tunnel Surveillance



### Application Note

**Why DYMEC**

- Up to 10G data transmission
- Flexible fiber distance
- Solid design for wide temperature operation

DYMEC offers a wide range of Temperature Hardened Industrial PoE+ (IEEE802.3bt) Switches for every camera and sensor need. All our switches come with our secure "Service Control" NSA Endpoint Security.



▲ A control center can monitor the remote tunnel traffic by long distance and real-time video data transmission.



Feature Highlight	Certification	When to use...
<ul style="list-style-type: none"> <li>• High speed up to 10G uplink</li> <li>• PoE PD alive check for PD recycle</li> <li>• IEEE802.3bt 60W/95W standard PoE</li> <li>• PoE Booster 12 to 57VDC</li> <li>• G.8032 ERPSv2 fast recovery ring</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> <li>• EN50121-4</li> </ul>	<ul style="list-style-type: none"> <li>• Tunnel Traffic</li> <li>• Roadside</li> <li>• Highway</li> <li>• Intersection</li> <li>• Vehicle</li> </ul>

### Product Spotlight



**KY-MH0804G4**  
8+4 Port Industrial Managed 60W PoE++ Gigabit Ethernet Switch

- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- IGMP Snooping v1/v2/v3, up to 1023 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Industrial automation protocols Ethernet/IP and Modbus TCP



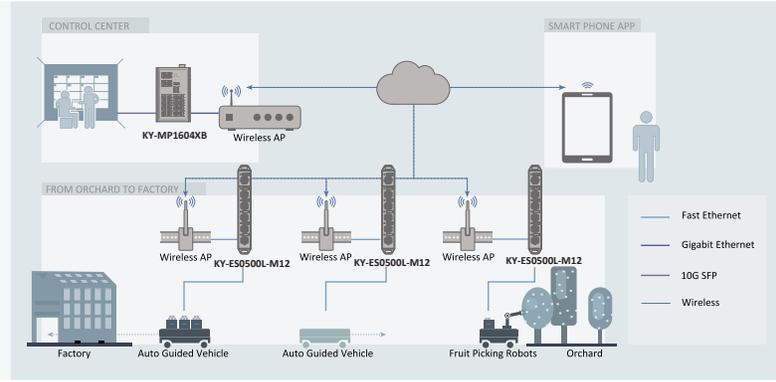
	KY-MTG0804	KY-MPG1604	KY-MPG2404	KY-MH0804G4	KY-MQ0804X2
GbE	✓	✓	✓	✓	✓
10GbE					✓
PoE Booster	✓				
Operating Temperature	-40° ~ +85°C				

■ IEEE802.3at 30W PoE+ Solution    ■ IEEE802.3bt 60W/95W PoE++ Solution

# IIOT Smart Farming



APPLICATION | **DYMEC**



## Application Note

### Why DYMEC

- Easy PoE status monitoring
- PoE alive check
- Built for harsh environments

DYMEC's Gigabit PoE+ switches provide smooth connections for AI recognition in your robotic networks



DYMEC Industrial switches work reliably and efficiently in rugged auto-guided vehicles for smart farm applications



Feature Highlight	Certification	Where to Use
<ul style="list-style-type: none"> <li>• Gigabit to 10 Gigabit uplink</li> <li>• RJ45 and M12 connector</li> <li>• 30W/60W/95W PoE PSE</li> <li>• ERPS fast recovery ring</li> <li>• DIN Rail and Rack mount installation</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> </ul>	<ul style="list-style-type: none"> <li>• Fruits Picking</li> <li>• Temperature &amp; Humidity Monitoring</li> <li>• Soil, Water, Light Management</li> <li>• Autonomous Tractors</li> <li>• Aquaculture</li> </ul>

## Product Spotlight

**SFP Slot**  
4x 1/10 Gigabit Ethernet SFP+ Slot

**Gigabit Ethernet Ports**  
16x Gigabit Ethernet ports with IEEE 802.3at PoE+

**Reset Button**  
- Reboot the system  
- Reset the system to factory default

**USB Storage**  
- Backup/Restore Configurations  
- Save system logs to USB

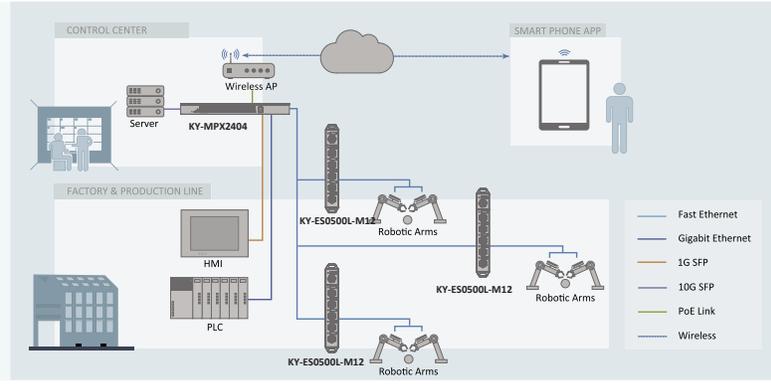
**KY-MP1604XB**  
16+4 Port Industrial Managed PoE+ Ethernet Switch with 10G Uplink

- RSTP, MSTP, ERPS, LACP for Network Redundancy
- Industrial automation protocols Ethernet/IP and Modbus TCP
- IGMP Snooping v1/v2/v3, up to 1023 group
- PoE PD Alive Check Function for PoE Device Power Recycle
- SNMP v1/v2c/v3 for network management

	KY-MSX1604	KY-MP1604XB	KY-MPX2404	KY-EPG0802	KY-IPG0101
Gigabit Ethernet Ports	✓	✓	✓	✓	✓
PoE		✓	✓	✓	✓ (60W)
1G/10G SFP+ Ports	✓	✓	✓		
Operating Temperature	-40° ~ +85°C				

■ IEEE802.3at 30W PoE+ Solution

# IIOT Smart Factory



### Application Note

#### Why DYMEC

- Easy data monitoring
- Friendly web interface
- Built for harsh environments

DYMEC's 10GbE PoE+ switches can help your Industrial networks seamlessly integrate into Industry 4.0 capabilities and production.



DYMEC's Industrial switches integrate into any factory production network. They provide nonstop production flow monitoring for Time Sensitive production control.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• Ethernet/IP, Modbus TCP and Profinet</li> <li>• Fast Ethernet to 10 Gigabit uplink</li> <li>• Copper to Fiber Links</li> <li>• USB storage of configurations and system logs</li> <li>• Data Collection and PoE Chart Status</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> <li>• EN50121-4</li> </ul>	<ul style="list-style-type: none"> <li>• Digital Factories</li> <li>• Fruits Packers</li> <li>• UGV (Unmanned Ground Vehicle)</li> <li>• Robotics Logistics</li> <li>• Transportation</li> </ul>

### Product Spotlight

**Unmanned Ground Vehicles**  
Unmanned ground vehicles apply on fruit picking and transportation

**Sensor Control**  
Sensor controllers to manage the temperature of the eco pool water

**Super Slim Size**  
Best choice for limited space  
3.2cm only

**Robotic Arm**  
Robotic arms apply on improving the effectiveness of the production line

**Robotics Arms**  
KY-ES0500L-M12

**KY-ES0500L-M12**  
5 Port M12/IP67 Industrial Unmanaged Ethernet Switch

- IP67 protection – against water and dust
- Rugged M12 connectors for shock and vibration resistance
- Temperature Hardened for extreme conditions

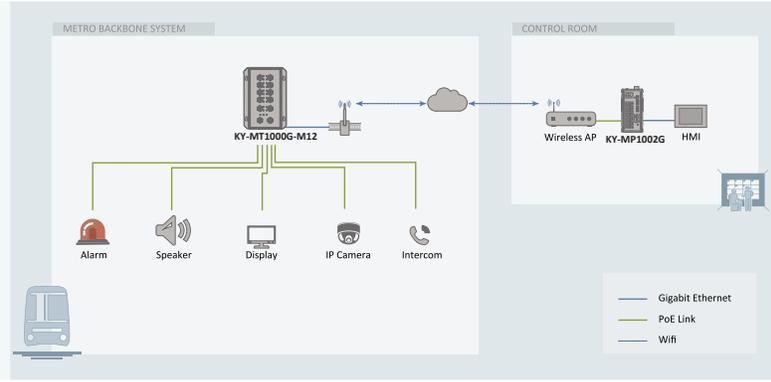
	KY-ES0500L-M12	KY-ES0500GA	KY-ES0800GA	KY-ES1600G	KY-MPX2404
Fast Ethernet	✓				
GbE		✓	✓	✓	
10GbE					✓
PoE					✓
Operating Temperature	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C

IEEE802.3at 30W PoE+ Solution

# Railway System

## Metro

APPLICATION | **DYMEC**



### Application Note

#### Why DYMEC

- Ruggedized M12 solution
- High power budget at PoE booster
- IP54 protection



Our sealed, temperature hardened M12 PoE+ Industrial Ethernet switches will provide smooth data & video streams from passenger information systems and IP cameras to Control Centers and to Metro carriages



▲ Gigabit & 10 Gigabit solutions ensure seamless video and PIS data transmission.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• PoE PD Alive Check for PD Recycle</li> <li>• 30W full M12 standard PoE solutions</li> <li>• PoE Booster 12 to 57VDC</li> <li>• Bypass scheme</li> <li>• Isolated power design</li> <li>• High power input 72 to 110VDC for M12 switches</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• EN50155</li> <li>• EN50121-4</li> <li>• EN45545-2</li> </ul>	<ul style="list-style-type: none"> <li>• Metro</li> <li>• Rail</li> <li>• Platform</li> <li>• Track Side</li> <li>• Bus</li> </ul>

### Product Spotlight

**M12 Connector**  
- 8x 10/100T(x) M12 connector with IEEE 802.3at PoE+  
- 2x 10/100/1000T(x) M12 connector with bypass function

**Power Boost**  
Power Boost for PoE+

**PoE PD Alive Check**  
for PoE Device Power Recycle

**Power Isolation**

**Bypass Function**  
2x 10/100/1000T(x) M12 connector with bypass function

**KY-MT0802C-M12**  
10 Port M12 Industrial Managed PoE+ Booster Gigabit Ethernet Switch

- Compliant with EN50155
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- IGMP Snooping v1/v2/v3, up to 1023 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management

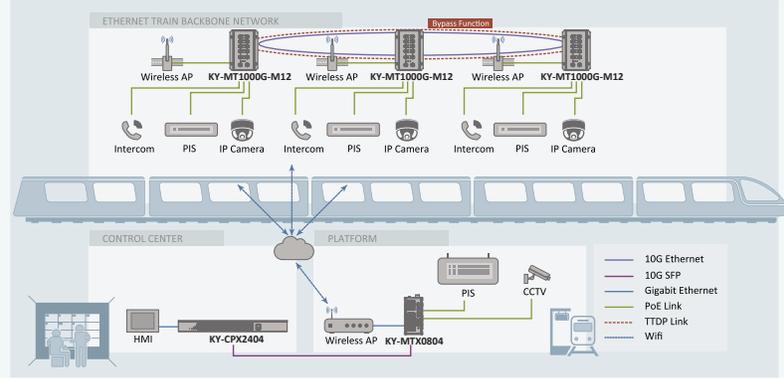
	KY-MPG1002	KY-MT0802C-M12	KY-MT1000G-M12	KY-ET0804C-M12	KY-ET1000G-M12
Fast Ethernet		✓	✓	✓	✓
GbE	✓	✓	✓	✓	✓
PoE Booster		✓	✓	✓	✓
Operating Temperature	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C

■ IEEE802.3at 30W PoE+ Solution

# Railway System

## Railway

APPLICATION | **DYMEC**



### Application Note

#### Why DYMEC



- Complete product solutions from train to ground
- Support TTDP/TRDP in train protocols
- Reliable data transmission and PoE supply

**DYMEC offers EN50155 certificated, temperature hardened, sealed, PoE+ switches with M12 connectors for harsh environments. Any voltage - any power. 5 Year Warranty**



▲ IEE802.3af/at and IEEE802.3bt industrial PoE switches ensure your nonstop network service of railway platforms.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• Train Topology Discovery Protocol (IEC61375-2-5)</li> <li>• Train Real-Time Data Protocol (IEC61375-2-3)</li> <li>• Fast Ethernet, Gigabit up to 10G speed</li> <li>• Reliable M12 connectors</li> <li>• Class IP54 water and dust protection</li> <li>• 24VDC PoE Booster or 48VDC / 72 to 110VDC</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• EN50155</li> <li>• EN50121-4</li> <li>• EN45545-2</li> </ul>	<ul style="list-style-type: none"> <li>• Railway</li> <li>• Metro</li> <li>• High Speed Rail</li> <li>• Bus</li> <li>• UGV (Unmanned Ground Vehicle)</li> </ul>

### Product Spotlight



#### KY-MT1000G-M12

- 10 Port M12 Industrial Managed PoE+ Booster Gigabit Ethernet Switch
- Compliance to TRDP, IEC61375-2-3 (TCN based on Ethernet Technology)
  - Bypass function for non-stop communication even when no power exist
  - Isolated redundant PoE power 190W
  - RSTP, MSTP, ERPS, LACP for Network Redundancy
  - QoS CoS/DSCP to increase determinism
  - Supports IGMP Snooping v1/v2/v3, up to 1023 groups



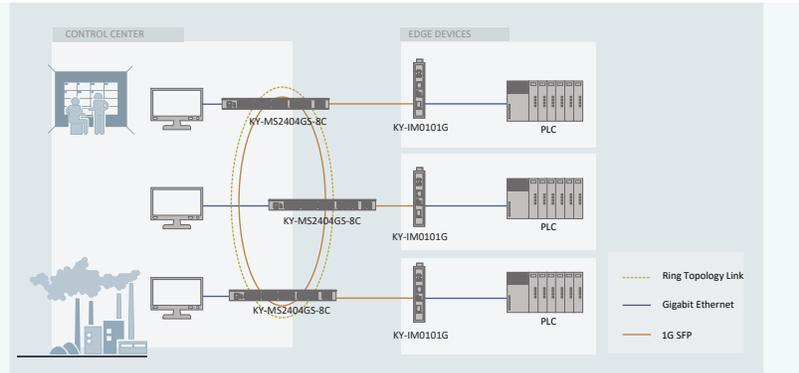
	KY-ES0804C-M12	KY-MS0802C-M12	KY-MT0802C-M12	KY-ET1000G-M12	KY-MT1000G-M12
Fast Ethernet	✓	✓	✓		
GbE	✓	✓	✓	✓	✓
10GbE					
PoE			✓	✓	✓
Management		✓	✓		
Operating Temperature	-40° ~ +85°C				

■ IEEE802.3at 30W PoE+ Solution

# Power & Energy

## Power Plant

APPLICATION | **DYMEC**



### Application Note

#### Why DYMEC



- IEC61850-3 & IEC61850-4 Safety Certified
- Intelligent data monitoring
- Rugged switches

Real-time Data Collection features, in the DYMEC switch, makes your network control management smarter. Your network is less congested with higher throughput.



To manage the machinery end devices in a control center of a power plant.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• IEEE1588v2 PTP</li> <li>• Gigabit to high speed</li> <li>• VRRPv2 802.1X, RADIUS, TACACS+, SSH</li> <li>• Temperature Hardened / -40° ~ +85°C NSA</li> <li>• Endpoint Secure</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61850-3</li> <li>• IEC61850-4</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> </ul>	<ul style="list-style-type: none"> <li>• Plant</li> <li>• Solar Power Plant</li> <li>• Data Center</li> </ul>

### Product Spotlight

#### KY-MS2404GS-8C

16+8+4 Port Industrial Managed Gigabit Ethernet Switch

- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to insure redundancy & delivery
- Supports IGMP Snooping v1/v2/v3, up to 1023 groups
- Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports industrial protocols Ethernet/IP and Modbus TCP

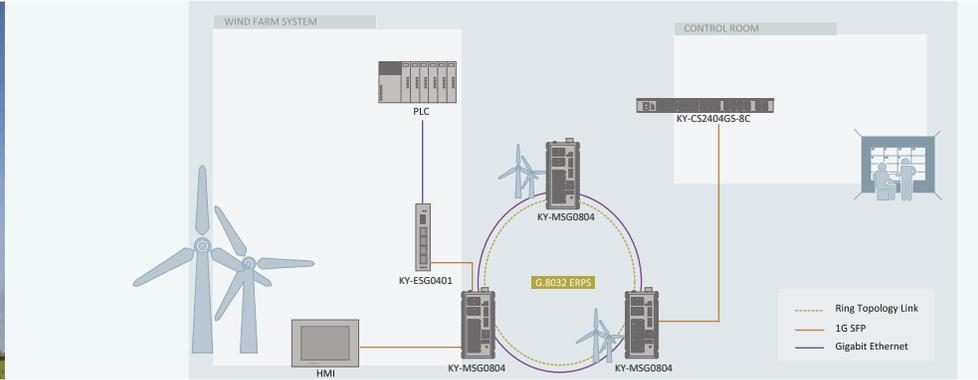


	IM-0101G	ES-0500LA	MS-0804G	MS-2404GS-8C	CS-2404GS-8C
Fast Ethernet		✓		✓	✓
GbE	✓		✓	✓	✓
IEC61850-3				✓	✓
Management			✓	✓	✓
Temperature Hardened	-30° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C

# Power & Energy

## Wind Farm

APPLICATION | **DYMEC**



### Application Note

#### Why DYMEC

- Slim size: Saving space
- Advanced Gigabit speed
- Easy installation

DYMEC provides both Managed and Unmanaged - Layer 2 and Layer 3 Industrial Ethernet switches. Safe, secure - includes a 5 Year Warranty.



• Dymec software features make your long distance networking management easier and more secure. **NSA Endpoint.**

Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• Low Power Consumption</li> <li>• 5 Year Warranty</li> <li>• PoE+ Booster</li> <li>• PoE PD alive check</li> <li>• Slim size</li> <li>• Redundant power inputs</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> </ul>	<ul style="list-style-type: none"> <li>• Wind Power Plant</li> <li>• Solar Power Plant</li> <li>• Renewable Energy</li> <li>• IP Surveillance</li> <li>• Oilfield Monitoring</li> </ul>

### Product Spotlight



#### KY-ESG0401

- 4+1 Port Industrial Unmanaged Gigabit Ethernet Switch
- 4x Gigabit Ethernet ports
  - 1x 100/1000F(x) SFP Slot
  - Built for harsh environments and wide temperature range application
  - IP30 housing
  - DIN-Rail Mounting, Optional Wall Mounting

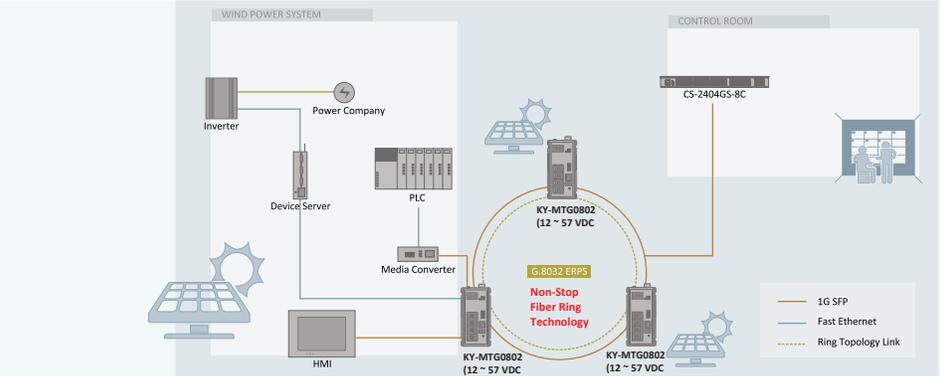


GbE	✓	✓	✓	✓	✓
PoE					✓
Managed	✓	✓	✓		
Fixed Fiber Version				✓	✓
Operating Temperature	-40° ~ +85°C				

# Power & Energy

## Solar Power

APPLICATION | **DYMEC**



### Application Note

#### Why DYMEC

- Nonstop data transmission
- Reliable operation in harsh environments
- Friendly web management interface

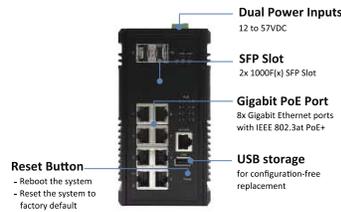


**DYMEC Industrial Ethernet switches support Non-Stop Fiber Rings for complete redundancy. Multi-Ring G.8032 ERPSv2. All have redundant Dual-Power inputs**



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• G.8032 ERPSv2 fast recovery ring</li> <li>• IPv6 management</li> <li>• Security authentication IEEE802.1X</li> <li>• Multiple functions reset button</li> <li>• Digital inputs and USB storage</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• EN50121-4</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> </ul>	<ul style="list-style-type: none"> <li>• Solar Power Plant</li> <li>• Energy Storage Monitoring System</li> <li>• Power Distribution Networks</li> <li>• Factory Logistics</li> <li>• Manufacturing Quality Check</li> </ul>

### Product Spotlight



#### KY-MTG0802

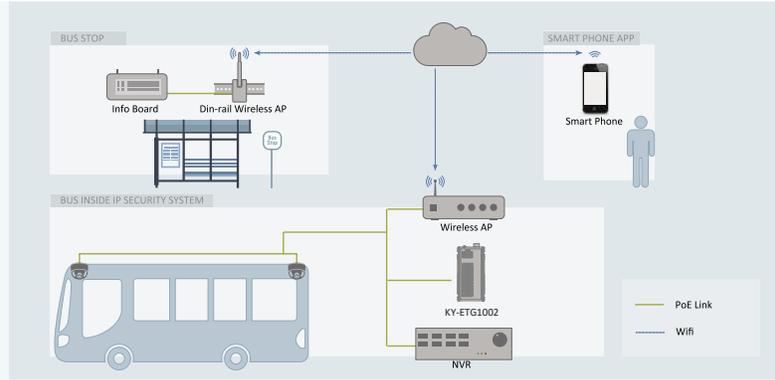
- 8+2 Port Industrial Managed PoE+ Booster Gigabit Ethernet Switch
- RSTP, MSTP, ERPS, LACP for Network Redundancy
  - IGMP Snooping v1/v2/v3, up to 1023 groups
  - SNMP v1/v2c/v3 for network management
  - DHCP Relay Option 82 for policies IP address assignment
  - QoS CoS/DSCP to increase determinism
  - Support industrial automation protocols Ethernet/IP and Modbus TCP
  - Supports PoE PD Alive Check Function for PoE Device Power Recycle
  - Power Boost for PoE+



	KY-MSG0802	KY-MSG0804	KY-CS2404G-8C	KY-EPG0401	KY-IPG0101
GbE	✓	✓	✓	✓	✓
PoE				✓	✓ (60W)
Layer 3			✓		
Fixed Fiber Version				✓	
Operating Temperature	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-30° ~ +85°C

■ IEEE802.3at 30W PoE+ Solution

# Smart City Bus



## Application Note

### Why DYMEC



- 1G/10G High Speed Transmission
- Flexible Customization Service
- Efficient Technical Support

For Shock & Vibration environments - you can count on rugged DYMEC industrial Ethernet switches with secure M12 connectors. Reliable data transmission. DYMEC has a full 5 Year Warranty



IP network construction is a key to build a smart city.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• Fast Ethernet/1G/10G solutions</li> <li>• Low power input 12VDC/24VDC/48VDC</li> <li>• High power input 72 to 110VDC for M12 switches</li> <li>• G.8032 ERPSv2 fast recovery ring</li> <li>• 802.1X, RADIUS, TACACS+, SSH</li> <li>• PoE Booster 12 to 57VDC</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• EN50155</li> <li>• EN50121-4</li> <li>• EN45545-2</li> </ul>	<ul style="list-style-type: none"> <li>• Bus &amp; Other Vehicle</li> <li>• Automatic Guided Vehicle</li> <li>• Robotic</li> <li>• Metro</li> <li>• High Speed Rail</li> </ul>

## Product Spotlight



### KY-ETG1002

10+2 Port Industrial Unmanaged PoE+ Booster Gigabit Ethernet Switch

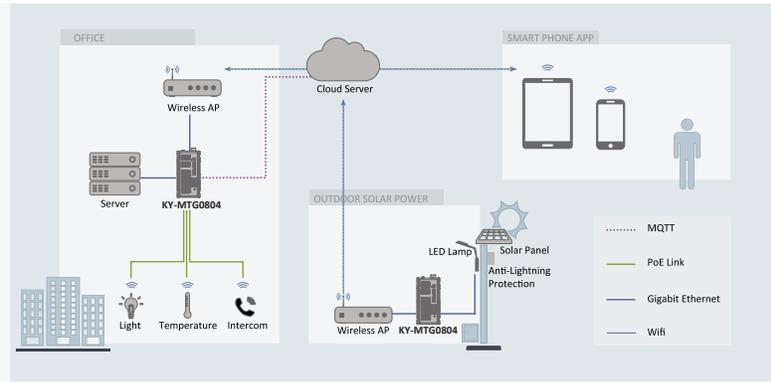
- 10x Gigabit Ethernet ports with 8x IEEE 802.3at PoE+
- 2x 100/1000F(x) SFP Slot
- Built for harsh environments and wide temperature range application
- IP30 housing
- DIN-Rail Mounting, Optional Wall Mounting
- 12 to 57VDC Power Inputs with Power Boost for PoE+



	KY-MT0802C-M12	KY-EPG0802	KY-ET0804C-M12	KY-ES0500L-M12	KY-ES0800L-M12
Fast Ethernet	✓		✓	✓	✓
GbE	✓	✓	✓		
PoE	✓	✓	✓		
Power Booster	✓	✓	✓		
M12				✓	✓
Operating Temperature	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C	-40° ~ +85°C

IEEE802.3at 30W PoE+ Solution

# Smart City Lighting Control



### Application Note

#### Why DYMEC

- Intelligent connectivity
- Easy remote monitoring
- Mobility management



**MQTT (MQ Telemetry Transport) is to enhance the mobility and convenience of your remote networking management with extremely low data rates. Used extensively in the oil, gas & chemical industries. (ISO/IEC PRF 20922) Also used in DOT infrastructure**

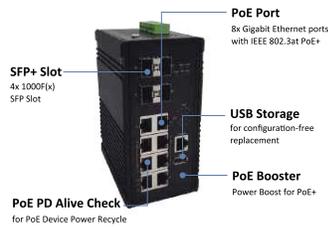


Remote monitoring feature breaks the limit of geography and saves your time.



Feature Highlight	Certification	Where to use
<ul style="list-style-type: none"> <li>• MQTT remote monitoring</li> <li>• PoE Booster</li> <li>• 802.1X, RADIUS, TACACS+ security</li> <li>• IPv6 management</li> <li>• Gigabit to 10G uplink</li> <li>• PoE Booster 12 to 57VDC</li> </ul>	<ul style="list-style-type: none"> <li>• UL</li> <li>• CE/FCC</li> <li>• IEC61000-6-2</li> <li>• IEC61000-6-4</li> </ul>	<ul style="list-style-type: none"> <li>• Building control system</li> <li>• Building surveillance</li> <li>• Safeguarding automation networks</li> <li>• Smart Factory production flow</li> <li>• Outdoor surveillance</li> </ul>

### Product Spotlight



#### KY-MTG0804

8+4 Port Industrial Managed PoE+ Booster Gigabit Ethernet Switch

- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Supports IGMP Snooping v1/v2/v3, up to 1023 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Support industrial automation protocols Ethernet/IP and Modbus TCP



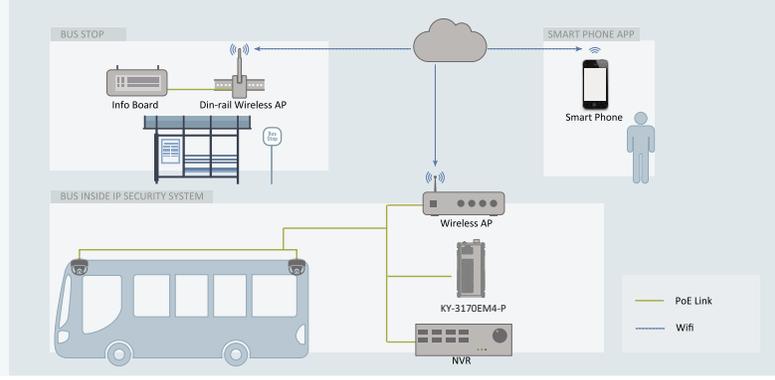
	KY-MTG0802	KY-MTG0804	KY-MTG1002	KY-CPG0804	KY-MPX2404
GbE	✓	✓	✓	✓	✓
10GbE					✓
PoE	✓	✓	✓	✓	✓
PoE Booster	✓	✓	✓		
Operating Temperature	-40° ~ +85°C				

IEEE802.3at 30W PoE+ Solution

# 3170 ITS Industrial Ethernet Traffic Switch

APPLICATION | **DYMEC**

Input File - Rack Mount Switch  
 KY-3170EM4 & KY-3170EM4/2 & KY-3170EM4-P  
 (IEEE802.3bt) 60 Watt PoE



## Application Note

### Why DYMEC



- 1G/10G High Speed Transmission
- Flexible Customization Service
- Efficient Technical Support

- **DYMEC Invented the 3170 Product**
- **NSA Endpoint Secure**
- **Ultra-low Power Consumption**
- **Easy Installation & Maintenance**
- **Built-in Traffic Analysis**
- **DYMEC has a full 5 Year Warranty**



IP network construction is a key to build a smart city.



Feature Highlight	Certification	Where to use
1) Fast Ethernet /1GbE / 10GbE Solutions 2) Low Power Input - 12 ~ 48 Volts DC 3) G.8032 ERPSv2 Self-Healing Ring 4) 802.1X, RADIUS, TACACS+, SSL, SSH 5) Built-in Traffic Analysis 6) Jumbo- Frame Support 7) ACL Support 8) IGMP Snooping 9) Mass Software Deployment & Upgrades	<ul style="list-style-type: none"> <li>• UL /CE /FCC</li> <li>• NEMA TS-2</li> <li>• EN50155</li> <li>• EN50121-4</li> <li>• EN45545-2</li> <li>• UL 60950-1</li> <li>• IEC 62380</li> </ul>	<ul style="list-style-type: none"> <li>o Bus &amp; Other Vehicles</li> <li>o Self Driving Vehicles</li> <li>o Auto-Guided Vehicles</li> <li>o Robotic Systems</li> <li>o Highway</li> <li>o Bridges &amp; Tunnels</li> <li>o Metro Rail</li> <li>o High Speed Rail</li> <li>o People Movers</li> </ul>



## KY-3170EM4 & KY-3170EM4/2

- **10 Port, 1 GbE, Industrial Ethernet Switch**
- 6 x 10/100/1000 TX RJ-45 Ports
- 4 x 1000 SFP Slots
- 1 x USB Port for Backup / Troubleshooting
- INPUT FILE Switch - Temperature Hardened
- G.8032 ERPSv2 Non-Stop Fiber Rings
- Layer 2 Switching
- MAC Table for Troubleshooting
- Fiber Port Diagnostics
- Copper Port Diagnostics
- RSTP / MSTP / VLAN
- NEMA & Non-NEMA Traffic Cabinets
- Power 12 ~ 48 Volts DC



	KY-3170EM4	KY-3170EM4/2	KY-3170EM4-P	KY-3170XM	KY-3170XR
GbE	✓	✓	✓	✓	✓
10GbE				✓	✓
PoE (bt)			✓		
Layer 2 Switch	✓	✓	✓	✓	✓
Layer 3 Router					
Temperature Hardened	-40° ~ +85°C				

\* NOTE: KY-3170EM4/2 includes - 2 x 1000 Copper RJ-45 SFP at no extra cost

## 3170 ITS Industrial Ethernet Traffic Switch

Input File - 1 / 10 GbE Rack Mount Switch  
 KY-3170XM & KY-3170XR Router

APPLICATION | **DYMEC**



### KY-3170XM

- **10 Port, 10 GbE, Industrial Ethernet Switch**
- 6 x 10/100/1000 TX RJ-45 Ports
- 4 x 1 GbE / 10 GbE SFP Slots
- 1 x USB Port for Backup / Troubleshooting
- INPUT FILE Switch - 2 SLOT
- Temperature Hardened
- G.8032 ERPSv2 Non-Stop Fiber Rings
- Layer 2 Switching
- MAC Table for Troubleshooting
- Fiber Port Diagnostics
- Copper Port Diagnostics
- Built-in Traffic Analysis
- RSTP / MSTP / VLAN
- NEMA & Non-NEMA Traffic Cabinets
- Power 12 ~ 48 Volts DC

### KY-3170XR



- **10 Port, 10 GbE, Industrial Ethernet Switch/ Router**
- 6 x 10/100/1000 TX RJ-45 Ports
- 4 x 1 GbE / 10 GbE SFP Slots
- 1 x USB Port for Backup / Troubleshooting
- INPUT FILE Switch - 2 SLOT
- Temperature Hardened
- G.8032 ERPSv2 Non-Stop Fiber Rings
- Layer 2 Switching & Layer 3 Routing
- MAC Table for Troubleshooting
- Fiber Port Diagnostics
- Copper Port Diagnostics
- Built-in Traffic Analysis
- RSTP / MSTP / VLAN
- NEMA & Non-NEMA Traffic Cabinets
- Power 12 ~ 48 Volts DC

ROUTING INCLUDES: STATIC IPv4 Routed, OSPFv2, GRE, VRRP

### Application Note

#### Why DYMEC

NSA Certified Secure Endpoint & Service Control

- Console Port Shutdown
- Reset Button Disabled
- Secure Chassis Enabled
- Easy to control GUI
- All telecom protocols are secure



Feature Highlight	Certification	Where to use
1) Fast Ethernet /1GbE / 10GbE Solutions 2) Low Power Input - 12 ~ 48 Volts DC 3) G.8032 ERPSv2 Self-Healing Ring 4) 802.1X, RADIUS, TACACS+, SSL, SSH 5) Built-in Traffic Analysis 6) Jumbo- Frame Support 7) ACL Support 8) IGMP Snooping 9) Mass Software Deployment & Upgrades	<ul style="list-style-type: none"> <li>• UL /CE /FCC</li> <li>• NEMA TS-2</li> <li>• EN50155</li> <li>• EN50121-4</li> <li>• EN45545-2</li> <li>• UL 60950-1</li> <li>• IEC 62380</li> </ul>	<ul style="list-style-type: none"> <li>o Bus &amp; Other Vehicles</li> <li>o Self Driving Vehicles</li> <li>o Auto-Guided Vehicles</li> <li>o Robotic Systems</li> <li>o Highway</li> <li>o Bridges &amp; Tunnels</li> <li>o Metro Rail</li> <li>o High Speed Rail</li> <li>o People Movers</li> </ul>

### Product Spotlight

### KY-3170EM4-P / IEEE802.3bt



- **10 Port, 1 GbE, Industrial PoE+ Ethernet Switch**
- 6 x 10/100/1000 TX RJ-45 PSE Ports
- 4 x 1000 SFP Slots
- 1 x USB Port for Backup / Troubleshooting
- INPUT FILE Switch - Temperature Hardened
- G.8032 ERPSv2 Non-Stop Fiber Rings
- Layer 2 Switching
- MAC Table for Troubleshooting
- Fiber Port Diagnostics
- Copper Port Diagnostics
- RSTP / MSTP / VLAN
- NEMA & Non-NEMA Traffic Cabinets
- **Power 12 ~ 48 Volts DC / PoE Power 48 ~ 57 Volts DC**

Industrial IEC61850-3 Managed Ethernet Switches



Layer 3

Model Name	KY-MS2404GS-8C non-PoE	KY-MS2800GFS-8C non-PoE	KY-CS2404GS-8C non-PoE
<b>Number of Port</b>			
Max. Port	28	28	28
Gigabit Ethernet Port	16	-	16
100/1000Tx SFP Port	-	20	-
1000Tx SFP Port	4	-	4
1G/10G SFP+ Port	-	-	-
Combo Port	8	8	8
<b>Mechanism</b>			
Enclosure	SECC/Aluminum	SECC/Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30
Dimensions(mm)	440x44x331	440x44x331	440x44x331
Weight(kg)	4.80 kg	4.70 kg	4.80 kg
Mounting	Rack Mount	Rack Mount	Rack Mount
<b>Environment</b>			
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>			
STP/RSTP	✓	✓	✓
MSTP	✓	✓	✓
ERPS	✓	✓	✓
MRP	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓
<b>Software Feature</b>			
802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, Modbus/TCP, Ethernet/IP, PROFINET			
<b>Layer 3 Feature</b>			
Static Routing	-	-	✓
OSPFv2	-	-	✓
RIP v1/v2	-	-	✓
<b>VRRPv2 Switch Property</b>			
Jumbo Frame Support	9216 bytes	12288 bytes	9216 bytes
MAC Table Size	16K	16K	16K
Packet Buffer Size	12 Mbits	32 Mbits	12 Mbits
Power Input	90 - 264 VAC, 88 - 370VDC 18 - 36 VAC, 36 - 75VDC	90 - 264 VAC, 88 - 370VDC 18 - 36 VAC, 36 - 75VDC	90 - 264 VAC, 88 - 370VDC 18 - 36 VAC, 36 - 75VDC
Power Consumption (Sys.)	30W	30W	30W
<b>Certification</b>			
CE / FCC / NEMA TS-2	✓	✓	✓
NSA / Service Control	✓	✓	✓
IEC61850-3/IEEE1613	✓	✓	✓

E

Industrial EN50155 M12 Managed Ethernet Switches



Model Name	KY-MT0802C-M12 PoE	KY-MT1000G-M12 PoE	KY-MS0802C-M12 non-PoE	KY-MS1000G-M12 non-PoE
<b>Number of Port</b>				
Max. Port	10	10	10	10
10 Gigabit Ethernet Port	-	-	-	-
Gigabit Ethernet Port	2	10	2	10
Fast Ethernet Port	8	-	8	-
100/1000Tx SFP Port	-	-	-	-
1000Tx SFP Port	-	-	-	-
1G/10G SFP+ Port	-	-	-	-
Fix Fiber Port	-	-	-	-
PoE Ports (802.3at)	8	8	-	-
PoE Ports (802.3bt)	-	-	-	-
Combo Port	-	-	-	-
<b>Mechanism</b>				
Enclosure	SECC	SECC	SECC	SECC
Protection Class	IP54	IP54	IP54	IP54
Dimensions(mm)	143x209x77	143x209x77	143x209x77	143x209x77
Weight(kg)	2.16 kg	2.16 kg	1.2 kg	1.2 kg
Mounting	Wall / Din-Rail*	Wall / Din-Rail*	Wall / Din-Rail*	Wall / Din-Rail*
<b>Environment</b>				
Operating Temperature	-40°C to 85°C (-40°F to -185°F)			
Storage Temperature	-40°C to 85°C (-40°F to -185°F)			
<b>Network Redundancy</b>				
STP/RSTP	✓	✓	✓	✓
MSTP	✓	✓	✓	✓
ERPS	✓	✓	✓	✓
MRP	Optional	Optional	✓	✓
Port Trunking / LACP	✓	✓	✓	✓
<b>Software Feature</b>				
802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET				
<b>Layer 3 Feature</b>				
Static Routing	-	-	-	-
OSPFv2	-	-	-	-
RIP v1/v2	-	-	-	-
TTDP/TRDP	-	-	-	-
<b>Switch Property</b>				
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	24VDC, 48VDC, 72-110VDC	24VDC, 48VDC, 72-110VDC	24 - 48VDC, 72-110VDC	24 - 48VDC, 72-110VDC
Power Consumption (Sys.)	16W 18W (24VDC) 15W (110VDC)	18W 19W (24VDC) 15W (110VDC)	15W	16W
PoE Power Budget	-	-	-	-
<b>Certification</b>				
CE / FCC / NEMA TS-2	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓
EN50155	✓	✓	✓	✓

Note: \* Std: Wall Mount Kit; Optional: Din-Rail Kit

Industrial EN50155 M12 Unmanaged Ethernet Switches



Model Name	KY-ET0802C-M12	KY-ET0804C-M12	KY-ET1000G-M12	KY-ES0802C-M12	KY-ES0804C-M12
	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>					
Max. Port	10	12	10	10	12
10 Gigabit Ethernet Port	-	-	-	-	-
Gigabit Ethernet Port	2	4	10	2	4
Fast Ethernet Port	8	8	-	8	8
100/1000Tx SFP Port	-	-	-	-	-
1000Tx SFP Port	-	-	-	-	-
1G/10G SFP+ Port	-	-	-	-	-
Fix Fiber Port	-	-	-	-	-
PoE Ports (802.3at)	8	8	8	-	-
PoE Ports (802.3bt)	-	-	-	-	-
Combo Port	-	-	-	-	-
<b>Mechanism</b>					
Enclosure	SECC	SECC	SECC	SECC	SECC
Protection Class	IP54	IP54	IP54	IP54	IP54
Dimensions(mm)	143x209x77	165x99x50	143x209x77	143x209x77	165x99x50
Weight(kg)	2.1 kg	2.2 kg	2.16 kg	1.2 kg	1.3 kg
Mounting	Wall / Din-Rail*				
<b>Environment</b>					
Operating Temperature	-40°C to 85°C (-40°F to -185°F)				
Storage Temperature	-40°C to 85°C (-40°F to -185°F)				
<b>Network Redundancy</b>					
STP/RSTP	-	-	-	-	-
MSTP	-	-	-	-	-
ERPS	-	-	-	-	-
MRP	-	-	-	-	-
Port Trunking / LACP	-	-	-	-	-
<b>Software Feature</b>					
			-		
<b>Layer 3 Feature</b>					
Static Routing	-	-	-	-	-
OSPFv2	-	-	-	-	-
RIP v1/v2	-	-	-	-	-
TTDP/TRDP	-	-	-	-	-
<b>Switch Property</b>					
Jumbo Frame Support	9216 bytes	9600 bytes	9216 bytes	9216 bytes	9600 bytes
MAC Table Size	16K	8K	16K	16K	8K
Packet Buffer Size	12 Mbits	4 Mbits	12 Mbits	12 Mbits	4 Mbits
Power Input	24VDC, 48VDC, 72-110VDC	24VDC, 48VDC, 72-110VDC	24VDC, 48VDC, 72-110VDC	24 - 48VDC, 72 - 110VDC	24 - 48VDC, 72 - 110VDC
Power Consumption (Sys.)	16W	16W	18W	15W	14W
PoE Power Budget	180W (24VDC) 150W (110VDC)	180W (24VDC) 150W (110VDC)	180W (24VDC) 150W (110VDC)	-	-
<b>Certification</b>					
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓
EN50155	✓	✓	✓	✓	✓

Note: \* Std: Wall Mount Kit; Optional: Din-Rail Kit

Industrial 10 Gigabit Layer 2 Managed Ethernet Switches



Model Name	KY-MPX0802	KY-MPX1002	KY-MPX0804	KY-MTX0804	KY-MH0804X2
	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>					
Max. Port	10	12	12	12	12
10 Gigabit Ethernet Port	-	-	-	-	-
Gigabit Ethernet Port	8	10	8	8	8
Fast Ethernet Port	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-
1000Tx SFP Port	-	-	-	-	-
1G/10G SFP+ Port	2	2	4	4	4
Fix Fiber Port	-	-	-	-	-
PoE Ports (802.3at)	8	8	8	8	4
PoE Ports (802.3bt)	-	-	-	-	2 (60W)
Combo Port	-	-	-	-	-
<b>Mechanism</b>					
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	72x145x118	72x145x118
Weight(kg)	0.88 kg	0.88 kg	0.90 kg	1.04 kg	0.90 kg
Mounting	DIN-Rail, Wall	DIN-Rail, Wall	DIN-Rail, Wall	DIN-Rail, Wall	DIN-Rail, Wall
<b>Environment</b>					
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>					
STP/RSTP	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓
MRP	✓	Optional	✓	✓	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓
<b>Software Feature</b>					
	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET				
<b>Switch Property</b>					
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57VDC	48 - 57VDC	48 - 57VDC	12 - 57VDC	48 - 57VDC
Power Consumption (Sys.)	19W	21W	21W	22W	19W
PoE Power Budget	240W	240W	240W	190W (24VDC)	240W
<b>Certification</b>					
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓
EN50121-4	✓	✓	✓	✓	-

**Industrial 10 Gigabit** Layer 2 Managed Ethernet Switches



Model Name	KY-MH0804X4	KY-MQ0804X2	KY-MPX1604	KY-MP1604XB	KY-MPX2404
	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>					
Max. Port	12	12	20	20	28
10 Gigabit Ethernet Port	-	-	-	-	-
Gigabit Ethernet Port	8	8	16	16	24
Fast Ethernet Port	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-
1000Tx SFP Port	-	-	-	-	-
1G/10G SFP+ Port	4	4	4	4	4
Fix Fiber Port	-	-	-	-	-
PoE Ports (802.3at)	-	4	8	16	24
PoE Ports (802.3bt)	4 (60W)	2 (95W)	-	-	-
Combo Port	-	-	-	-	-
<b>Mechanism</b>					
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	91x145x118	91x145x118	440x44x420
Weight(kg)	0.90 kg	0.90 kg	1.03 kg	1.40 kg	6.00 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount
<b>Environment</b>					
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>					
STP/RSTP	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET				
<b>Switch Property</b>					
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57 VDC	48 - 57 VDC	48 - 57 VDC	48 - 57VDC	90-264VAC,48-57VDC
Power Consumption (Sys.)	19W	19W	24W	21W	26W
PoE Power Budget	240W	240W	240W	240W	720W@DC; Max. 377W@AC with derating (50°C to 70°C, 2.5%/°C)
<b>Certification</b>					
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	-
EN50121-4	✓	✓	✓	✓	✓

E

**Industrial 10 Gigabit** Layer 2 Managed Ethernet Switches



Model Name	KY-MSX0802	KY-MSX0804	KY-MSX0812	KY-MSX1604	KY-MSX2404	KY-MS2404XF
	non-PoE	non-PoE	non-PoE	non-PoE	non-PoE	non-PoE
<b>Number of Port</b>						
Max. Port	10	12	20	20	28	28
10 Gigabit Ethernet Port	-	-	-	-	-	-
Gigabit Ethernet Port	8	8	8	16	24	-
Fast Ethernet Port	-	-	-	-	-	-
100/1000Tx SFP Port	-	-	8	-	-	24
1000Tx SFP Port	-	-	-	-	-	-
1G/10G SFP+ Port	2	4	4	4	4	4
Fix Fiber Port	-	-	-	-	-	-
PoE Ports (802.3at)	-	-	-	-	-	-
PoE Ports (802.3bt)	-	-	-	-	-	-
Combo Port	-	-	-	-	-	-
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	91x145x118	91x145x118	440x44x420	440x44x331
Weight(kg)	0.88 kg	0.87 kg	1.38 kg	0.97 kg	5.00 kg	4.50 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount	Rack Mount
<b>Environment</b>						
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	✓	✓	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	12288 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	32 Mbits
Power Input	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	90 - 264VAC,24 - 48VDC	90 - 264VAC,12 - 36VDC, 36 - 72VDC
Power Consumption (Sys.)	16W	16W	19W	17W	26W	30W
PoE Power Budget	-	-	-	-	-	-
<b>Certification</b>						
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	-	-
EN50121-4	✓	✓	✓	✓	-	-

Industrial 10 Gigabit Layer 3 Managed Ethernet Switches



Model Name	KY-CPX0802	KY-CPX1002	KY-CPX0804	KY-CTX0804	KY-CH0804X2
	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>					
Max. Port	10	12	12	12	12
10 Gigabit Ethernet Port	-	-	-	-	-
Gigabit Ethernet Port	8	10	8	8	8
Fast Ethernet Port	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-
1000Tx SFP Port	-	-	-	-	-
1G/10G SFP+ Port	2	2	4	4	4
Fix Fiber Port	-	-	-	-	-
PoE Ports (802.3at)	8	8	8	8	4
PoE Ports (802.3bt)	-	-	-	-	2 (60W)
Combo Port	-	-	-	-	-
<b>Mechanism</b>					
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	72x145x118	72x145x118
Weight(kg)	0.88 kg	0.90 kg	0.90 kg	1.04 kg	0.90 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall
<b>Environment</b>					
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>					
STP/RSTP	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET				
<b>Layer 3 Feature</b>					
Static Routing	✓	✓	✓	✓	✓
VRRPv2	✓	✓	✓	✓	✓
OSPFv2	✓	✓	✓	✓	✓
RIP v1/v2	✓	✓	✓	✓	✓
<b>Switch Property</b>					
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57 VDC	48 - 57 VDC	48 - 57 VDC	12 - 57 VDC	48 - 57VDC
Power Consumption (Sys.)	19W	21W	21W	22W	19W
PoE Power Budget	240W	240W	240W	190W (24VDC)	240W
<b>Certification</b>					
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓
EN50121-4	✓	✓	✓	✓	-

E

Industrial 10 Gigabit Layer 3 Managed Ethernet Switches



Model Name	KY-CH0804X4	KY-CQ0804X2	KY-CPX1604	KY-CP1604XB	KY-CPX2404
	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>					
Max. Port	12	12	20	20	28
10 Gigabit Ethernet Port	-	-	-	-	-
Gigabit Ethernet Port	8	8	16	16	24
Fast Ethernet Port	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-
1000Tx SFP Port	-	-	-	-	-
1G/10G SFP+ Port	4	4	4	4	4
Fix Fiber Port	-	-	-	-	-
PoE Ports (802.3at)	-	4	8	16	24
PoE Ports (802.3bt)	4 (60W)	2 (95W)	-	-	-
Combo Port	-	-	-	-	-
<b>Mechanism</b>					
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	91x145x118	91x145x118	440x44x420
Weight(kg)	0.90 kg	0.90 kg	1.03 kg	1.40 kg	6.00 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount
<b>Environment</b>					
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>					
STP/RSTP	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET				
<b>Layer 3 Feature</b>					
Static Routing	✓	✓	✓	✓	✓
VRRPv2	✓	✓	✓	✓	✓
OSPFv2	✓	✓	✓	✓	✓
RIP v1/v2	✓	✓	✓	✓	✓
<b>Switch Property</b>					
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57 VDC	48 - 57 VDC	48 - 57 VDC	48 - 57VDC	90-264VAC,48-57VDC
Power Consumption (Sys.)	19W	19W	19W	21W	26W
PoE Power Budget	240W	240W	240W	240W	720W@DC Max. 37W@PoE with derating (50°C to 70°C, 2.5%/°C)
<b>Certification</b>					
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	-
EN50121-4	✓	✓	✓	-	-

E

## Industrial 10 Gigabit Layer 3 Managed Ethernet Switches



Model Name	KY-CSX0802	KY-CSX0804	KY-CSX0812	KY-CSX1604	KY-CSX2404
	non-PoE	non-PoE	non-PoE	non-PoE	non-PoE
<b>Number of Port</b>					
Max. Port	10	12	20	20	28
10 Gigabit Ethernet Port	-	-	-	-	-
Gigabit Ethernet Port	8	8	8	16	24
Fast Ethernet Port	-	-	-	-	-
100/1000Tx SFP Port	-	-	8	-	-
1000Tx SFP Port	-	-	-	-	-
1G/10G SFP+ Port	2	4	4	4	4
Fix Fiber Port	-	-	-	-	-
PoE Ports (802.3at)	-	-	-	-	-
PoE Ports (802.3bt)	-	-	-	-	-
Combo Port	-	-	-	-	-
<b>Mechanism</b>					
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	91x145x118	91x145x118	440x44x420
Weight(kg)	0.88 kg	0.87 kg	1.38 kg	0.97 kg	5.00 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount
<b>Environment</b>					
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>					
STP/RSTP	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588/PTP, CoS, Modbus/TCP, Ethernet/IP, PROFINET				
<b>Layer 3 Feature</b>					
Static Routing	✓	✓	✓	✓	✓
VRRPv2	✓	✓	✓	✓	✓
OSPFv2	✓	✓	✓	✓	✓
RIP v1/v2	✓	✓	✓	✓	✓
<b>Switch Property</b>					
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	90-264VAC,24-48VDC
Power Consumption (Sys.)	16W	16W	19W	17W	26W
PoE Power Budget	-	-	-	-	-
<b>Certification</b>					
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	-
EN50121-4	✓	✓	✓	✓	-

## COMPARISON TABLE | DYMEC

## Industrial Gigabit Layer 2 Managed Ethernet Switches



Model Name	KY-MPG0802	KY-MTG0802	KY-MPG1002	KY-MTG1002	KY-MPG0804	KY-MTG0804
	PoE	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>						
Max. Port	10	10	12	12	12	12
10 Gigabit Ethernet Port	-	-	-	-	-	-
Gigabit Ethernet Port	8	8	10	10	8	8
Fast Ethernet Port	-	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-	-
1000Tx SFP Port	2	2	2	2	4	4
1G/10G SFP+ Port	-	-	-	-	-	-
Fix Fiber Port	-	-	-	-	-	-
PoE Ports (802.3at)	8	8	8	8	8	8
PoE Ports (802.3bt)	-	-	-	-	-	-
Combo Port	-	-	-	-	-	-
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	72x145x118	72x145x118	72x145x118
Weight(kg)	0.88 kg	1.02kg	0.88 kg	1.12 kg	0.90 kg	1.04 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall
<b>Environment</b>						
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	✓	✓	Optional	Optional	✓	✓
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay(Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, CoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57 VDC	12 - 57 VDC	48 - 57 VDC	12 - 57 VDC	48 - 57 VDC	12 - 57 VDC
Power Consumption (Sys.)	16W	17W	16W	16W	19W	22W
PoE Power Budget	240W	190W (24VDC)	240W	190 W (24VDC)	240W	190 W (24VDC)
<b>Certification</b>						
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓	✓
EN50121-4	✓	✓	✓	✓	✓	✓

## Industrial Gigabit Layer 2 Managed Ethernet Switches



Model Name	KY-MH0804G2	KY-MH0804G4	KY-MQ0804G2	KY-MPG1604	KY-MP1604GB	KY-MPG2404
	PoE	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>						
Max. Port	12	12	12	20	20	28
10 Gigabit Ethernet Port	-	-	-	-	-	-
Gigabit Ethernet Port	8	8	8	16	16	24
Fast Ethernet Port	-	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-	-
1000Tx SFP Port	4	4	4	4	4	4
1G/10G SFP+ Port	-	-	-	-	-	-
Fix Fiber Port	-	-	-	-	-	-
PoE Ports (802.3at)	4	-	4	8	16	24
PoE Ports (802.3bt)	2 (60W)	4 (60W)	2 (95W)	-	-	-
Combo Port	-	-	-	-	-	-
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	91x145x118	91x145x118	440x44x331
Weight(kg)	0.90 kg	0.90 kg	0.90 kg	1.40 kg	1.40 kg	6.00 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount
<b>Environment</b>						
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57 VDC	48 - 57 VDC	48 - 57 VDC	48 - 57 VDC	48 - 57 VDC	90-264VAC,48-57VDC
Power Consumption (Sys.)	19W	19W	19W	22W	16W	19W
PoE Power Budget	240W	240W	240W	240W	240W	720W@DC Max. 37W@AC with derating (50°C to 70°C, 15%/°C)
<b>Certification</b>						
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓	-
EN50121-4	✓	✓	✓	✓	✓	✓

## COMPARISON TABLE | DYMEC

## Industrial Gigabit Layer 2 Managed Ethernet Switches



Model Name	KY-MSG0802	KY-MSG1002	KY-MSG0804	KY-MSG0812	KY-MSG1604	KY-MSG2404-8C
	non-PoE	non-PoE	non-PoE	non-PoE	non-PoE	non-PoE
<b>Number of Port</b>						
Max. Port	10	12	12	20	20	28
10 Gigabit Ethernet Port	-	-	-	-	-	-
Gigabit Ethernet Port	8	10	8	8	16	16
Fast Ethernet Port	-	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	8	-	-
1000Tx SFP Port	2	2	4	4	4	4
1G/10G SFP+ Port	-	-	-	-	-	-
Fix Fiber Port	-	-	-	-	-	-
PoE Ports (802.3at)	-	-	-	-	-	-
PoE Ports (802.3bt)	-	-	-	-	-	-
Combo Port	-	-	-	-	-	8
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	91x145x118	91x145x118	440x44x331
Weight(kg)	0.85 kg	0.87kg	0.87 kg	1.38 kg	0.97 kg	4.48 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount
<b>Environment</b>						
Operating Temperature	-40 C to 85 C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40 C to 85 C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	✓	Optional	✓	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	90-264VAC,12-48VDC
Power Consumption (Sys.)	13W	14W	14W	19W	17W	30W
PoE Power Budget	-	-	-	-	-	-
<b>Certification</b>						
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓	-
EN50121-4	✓	✓	✓	✓	✓	-

Industrial Gigabit Layer 3 Managed Ethernet Switches



Model Name	KY-CPG0802	KY-CTG0802	KY-CPG1002	KY-CTG1002	KY-CPG0804	KY-CTG0804
	PoE	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>						
Max. Port	10	10	12	12	12	12
10 Gigabit Ethernet Port	-	-	-	-	-	-
Gigabit Ethernet Port	8	8	10	10	8	8
Fast Ethernet Port	-	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-	-
1000Tx SFP Port	2	2	2	2	4	4
1G/10G SFP+ Port	-	-	-	-	-	-
Fix Fiber Port	-	-	-	-	-	-
PoE Ports (802.3at)	8	8	8	8	8	8
PoE Ports (802.3bt)	-	-	-	-	-	-
Combo Port	-	-	-	-	-	-
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	72x145x118	72x145x118	72x145x118
Weight(kg)	0.88 kg	1.02 kg	0.88 kg	1.12 kg	0.90 kg	1.04 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall
<b>Environment</b>						
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Layer 3 Feature</b>						
Static Routing	✓	✓	✓	✓	✓	✓
VRRPv2	✓	✓	✓	✓	✓	✓
OSPFv2	✓	✓	✓	✓	✓	✓
RIP v1/v2	✓	✓	✓	✓	✓	✓
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57VDC	12 - 57VDC	48 - 57VDC	12 - 57VDC	48 - 57VDC	12 - 57VDC
Power Consumption (Sys.)	16W	17W	16W	16W	17W	22W
PoE Power Budget	240W	190W (24VDC)	240W	190W (24VDC)	240W	190W (24VDC)
<b>Certification</b>						
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓	✓
EN50121-4	✓	✓	✓	✓	✓	✓

E

Industrial Gigabit Layer 3 Managed Ethernet Switches



Model Name	KY-CH0804G2	KY-CH0804G4	KY-CQ0804G2	KY-CPG1604	KY-CP1604GB	KY-CPG2404
	PoE	PoE	PoE	PoE	PoE	PoE
<b>Number of Port</b>						
Max. Port	12	12	12	20	20	28
10 Gigabit Ethernet Port	-	-	-	-	-	-
Gigabit Ethernet Port	8	8	8	16	16	24
Fast Ethernet Port	-	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	-	-	-
1000Tx SFP Port	4	4	4	4	4	4
1G/10G SFP+ Port	-	-	-	-	-	-
Fix Fiber Port	-	-	-	-	-	-
PoE Ports (802.3at)	4	-	4	8	16	24
PoE Ports (802.3bt)	2 (60W)	4 (60W)	2 (95W)	-	-	-
Combo Port	-	-	-	-	-	-
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	91x145x118	91x145x118	440x44x331
Weight(kg)	0.90 kg	0.90 kg	0.90 kg	1.40 kg	1.40 kg	6.00 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount
<b>Environment</b>						
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Layer 3 Feature</b>						
Static Routing	✓	✓	✓	✓	✓	✓
VRRPv2	✓	✓	✓	✓	✓	✓
OSPFv2	✓	✓	✓	✓	✓	✓
RIP v1/v2	✓	✓	✓	✓	✓	✓
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	48 - 57VDC	48 - 57VDC	48 - 57VDC	48 - 57VDC	48 - 57VDC	90 - 264VAC, 48 - 57VDC
Power Consumption (Sys.)	19W	19W	19W	22W	16W	19W
PoE Power Budget	240W	240W	240W	240W	240W	240W@50°C Max. 377W@AC with derating (50°C to 70°C, 5.5%/°C)
<b>Certification</b>						
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓	-
EN50121-4	✓	✓	✓	✓	✓	-

E

## Industrial Gigabit Layer 3 Managed Ethernet Switches



Model Name	KY-CSG0802	KY-CSG1002	KY-CSG0804	KY-CSG0812	KY-CSG1604	KY-CSG2404-8C
	non-PoE	non-PoE	non-PoE	non-PoE	non-PoE	non-PoE
<b>Number of Port</b>						
Max. Port	10	12	12	20	20	28
10 Gigabit Ethernet Port	-	-	-	-	-	-
Gigabit Ethernet Port	8	10	8	8	16	16
Fast Ethernet Port	-	-	-	-	-	-
100/1000Tx SFP Port	-	-	-	8	-	-
1000Tx SFP Port	2	2	4	4	4	4
1G/10G SFP+ Port	-	-	-	-	-	-
Fix Fiber Port	-	-	-	-	-	-
PoE Ports (802.3at)	-	-	-	-	-	-
PoE Ports (802.3bt)	-	-	-	-	-	-
Combo Port	-	-	-	-	-	8
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	72x145x118	72x145x118	72x145x118	91x145x118	91x145x118	440x44x331
Weight(kg)	0.85 kg	0.87 kg	0.87 kg	1.38 kg	0.97 kg	4.80 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	Rack Mount
<b>Environment</b>						
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Layer 3 Feature</b>						
Static Routing	✓	✓	✓	✓	✓	✓
VRRPv2	✓	✓	✓	✓	✓	✓
OSPFv2	✓	✓	✓	✓	✓	✓
RIP v1/v2	✓	✓	✓	✓	✓	✓
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	12 - 48 VDC	90-264VAC,12-48VDC
Power Consumption (Sys.)	13W	14W	14W	19W	17W	30W
PoE Power Budget	-	-	-	-	-	-
<b>Certification</b>						
CE / FCC / NEMA TS-2	✓	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓	-
EN50121-4	✓	✓	✓	✓	✓	-

## COMPARISON TABLE | DYMEC

## Compact Size Switch Layer 2 Managed Ethernet Switches



Model Name	KY-MP0802GE	KY-MS0802GE	KY-MP0402GE	KY-MS0402GE
	PoE	non-PoE	PoE	non-PoE
<b>Number of Port</b>				
Max. Port	10	10	6	6
10 Gigabit Ethernet Port	-	-	-	-
Gigabit Ethernet Port	8	8	4	4
Fast Ethernet Port	-	-	-	-
100/1000Tx SFP Port	-	-	-	-
1000Tx SFP Port	2	2	2	2
1G/10G SFP+ Port	-	-	-	-
Fix Fiber Port	-	-	-	-
PoE Ports (802.3at)	8	-	4	-
PoE Ports (802.3bt)	-	-	-	-
Combo Port	-	-	-	-
<b>Mechanism</b>				
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum
Protection Class	IP30	IP30	IP30	IP30
Dimensions(mm)	50x120x100	50x120x100	50x120x100	50x120x100
Weight(kg)	1.0 kg	0.7 kg	0.8 kg	0.5 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall
<b>Environment</b>				
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>				
STP/RSTP	✓	✓	✓	✓
MSTP	✓	✓	✓	✓
ERPS	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay(Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET			
<b>Switch Property</b>				
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K
Packet Buffer Size	4 Mbits	4 Mbits	4 Mbits	4 Mbits
Power Input	48 - 57 VDC	12 - 48 VDC	48 - 57 VDC	12 - 48 VDC
Power Consumption (Sys.)	18W	15W	18W	15W
PoE Power Budget	240W	-	240W	-
<b>Certification</b>				
CE / FCC / NEMA TS-2	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓
EN50121-4	-	-	-	-

Industrial Unmanaged Ethernet Switches



Model Name	KY-ES0500L-M12	KY-ES0500LA	KY-ES0800LA	KY-ES0401G <small>NEW</small>
	non-PoE	non-PoE	non-PoE	non-PoE
<b>Number of Port</b>				
Max. Port	5	5	8	5
Gigabit Ethernet Port	-	-	-	4
Fast Ethernet Port	5 (M12)	5	8	-
100/1000Tx SFP Port	-	-	-	-
1000Tx SFP Port	-	-	-	1
Fix Fiber Port	-	-	-	-
PoE Ports (802.3at)	-	-	-	-
PoE Ports (802.3bt)	-	-	-	-
<b>Mechanism</b>				
Enclosure	Plastic	Aluminum	Aluminum	SECC
Protection Class	IP67	IP30	IP30	IP30
Dimensions(mm)	33x217x43	25x130x98	30x142x98	30x140x98
Weight(kg)	0.3 kg	0.32 kg	0.37 kg	0.6 kg
Mounting	Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall
<b>Environment</b>				
Operating Temperature	-40° ~ +85°C (-40° ~ 185°F)	-40° ~ +85°C (-40° ~ 185°F)	-40° ~ +85°C (-40° ~ 185°F)	-40° ~ +85°C (-40° ~ 185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>				
STP/RSTP	-	-	-	-
MSTP	-	-	-	-
ERPS	-	-	-	-
MRP	-	-	-	-
Port Trunking / LACP	-	-	-	-
<b>Software Feature</b>				
<b>Layer 3 Feature</b>				
Static Routing	-	-	-	-
OSPFv2	-	-	-	-
RIP v1/v2	-	-	-	-
TTDP/TRDP	-	-	-	-
<b>Switch Property</b>				
Jumbo Frame Support	-	-	-	9600bytes
MAC Table Size	1K	1K	2K	2K
Packet Buffer Size	448 Kbits	448 Kbits	768 Kbits	1 Mbits
Power Input	12 - 48VDC	12 - 56V DC Terminal Block (2-pin 5mm) or 5.5/2	12 - 56V DC Terminal Block (2-pin 5mm) or 5.5/2	12 - 48VDC
Power Consumption (Sys.)	2W	4W	5W	5W
PoE Power Budget	-	-	-	-
<b>Certification</b>				
CE / FCC / UL / NEMA-TS-2	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓
IEC61000-6-2 / -6-4	-	-	-	-

Industrial Unmanaged Ethernet Switches



Model Name	KY-ES0500GA	KY-ES0800GA	KY-ESG0802	KY-ESG1600	KY-EPG0401 <small>NEW</small>
	non-PoE	non-PoE	non-PoE	non-PoE	PoE
<b>Number of Port</b>					
Max. Port	5	8	10	16	5
Gigabit Ethernet Port	5	8	8	16	4
Fast Ethernet Port	-	-	-	-	-
100/1000Tx SFP Port	-	-	2	-	-
1000Tx SFP Port	-	-	-	-	1
Fix Fiber Port	-	-	-	-	-
PoE Ports (802.3at)	-	-	-	-	4
PoE Ports (802.3bt)	-	-	-	-	-
<b>Mechanism</b>					
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	SECC
Protection Class	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	30x142x98	30x142x98	50x120x100	45x136x95	30x140x98
Weight(kg)	0.35 kg	0.37 kg	0.7 kg	0.5 kg	0.7 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall
<b>Environment</b>					
Operating Temperature	-40° ~ +85°C (-40° ~ 185°F)	-40° ~ +85°C (-40° ~ 185°F)	-40° ~ +85°C (-40° ~ 185°F)	-40° ~ +85°C (-40° ~ 185°F)	-40° ~ +85°C (-40° ~ 185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>					
STP/RSTP	-	-	-	-	-
MSTP	-	-	-	-	-
ERPS	-	-	-	-	-
MRP	-	-	-	-	-
Port Trunking / LACP	-	-	-	-	-
<b>Software Feature</b>					
<b>Layer 3 Feature</b>					
Static Routing	-	-	-	-	-
OSPFv2	-	-	-	-	-
RIP v1/v2	-	-	-	-	-
TTDP/TRDP	-	-	-	-	-
<b>Switch Property</b>					
Jumbo Frame Support	9216bytes	9216bytes	9600bytes	9600bytes	9600bytes
MAC Table Size	4K	4K	8K	8K	2K
Packet Buffer Size	1.5 Mbits	1.5 Mbits	4 Mbits	4 Mbits	1 Mbits
Power Input	12 - 48VDC	12 - 56V DC Terminal Block (2-pin 5mm) or 5.5/2	12 - 48VDC	12 - 48VDC	48 - 57VDC
Power Consumption (Sys.)	6W	6W	15W	15W	5W
PoE Power Budget	-	-	-	-	120W
<b>Certification</b>					
CE / FCC / UL / NEMA-TS-2	✓	✓	✓	✓	✓
NSA / Service Control	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	-	-	✓	✓	-

## ITS INDUSTRIAL 3170 SERIES - TRAFFIC / DOT



Model Name	KY-3170EM4	KY-3170EM4/2	KY-3170EM4-P	KY-3170XM	KY-3170XR	KY-3100EM
<b>Number of Port</b>			PoE			
Max. Port	10	10	10	10	10	10
10 Gigabit Ethernet Port						
Gigabit Ethernet Port	6	6	6	6	6	8
Fast Ethernet Port						
100/1000Tx SFP Port						
1000Tx SFP Port	4	4	4			2
1G/10G SFP+ Port				4	4	
Fix Fiber Port						
PoE Ports (802.3at)						
PoE Ports (802.3bt)			6			
Combo Port						
<b>Mechanism</b>						
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	SECC/Aluminum
Protection Class	IP30	IP30	IP30	IP30	IP30	IP30
Dimensions(mm)	58 x 114 x 205	58 x 114 x 205	58 x 114 x 205	58 x 114 x 205	58 x 114 x 205	72x145x118
Weight(kg)	0.87 kg	0.87 kg	0.87 kg	0.87 kg	0.87 kg	0.88 kg
Mounting	Rack Mount	Rack Mount	Rack Mount	Rack Mount	Rack Mount	DIN-Rail,Wall
<b>Environment</b>						
Operating Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
Storage Temperature	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)	-40°C to 85°C (-40°F to -185°F)
<b>Network Redundancy</b>						
STP/RSTP	✓	✓	✓	✓	✓	✓
MSTP	✓	✓	✓	✓	✓	✓
ERPS	✓	✓	✓	✓	✓	✓
MRP	Optional	Optional	Optional	Optional	Optional	Optional
Port Trunking / LACP	✓	✓	✓	✓	✓	✓
<b>Software Feature</b>	802.1X, IPv6, Storm Control, UPnP, SNMP v1/v2c/v3, Event Warning, Port Mirror, LLDP, DHCP Server, DHCP Relay (Option82), USB Configuration, 802.1Q VLAN, VLAN Q-in-Q, IGMP Snooping/MLD Snooping, IEEE 1588 v2/PTP, QoS, PoE Control, Modbus/TCP, Ethernet/IP, PROFINET					
<b>Layer 3 Feature</b>						
Static Routing					✓	
VRRPv2					✓	
OSPFv2					✓	
RIP v1/v2					✓	
<b>Switch Property</b>						
Jumbo Frame Support	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes	9216 bytes
MAC Table Size	16K	16K	16K	16K	16K	16K
Packet Buffer Size	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits	12 Mbits
Power Input	12~48 VDC	12~48 VDC	48~57 VDC	12~48 VDC	12~48 VDC	12~48 VDC
Power Consumption (Sys.)	16W	17W	16W	16W	17W	22W
NSA /Service Control	✓	✓	✓	✓	✓	✓
<b>Certification</b>						
CE / FCC / UL	✓	✓	✓	✓	✓	✓
NEMA TS-2	✓	✓	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓	✓	✓
EN50121-4	✓	✓	✓	✓	✓	✓

E

## COMPARISON TABLE | DYMEC



Model Name	KY-EPG0802	KY-ET1002G	KY-IM0101G	KY-IP0101G
<b>Number of Port</b>	PoE	PoE	non-PoE	PoE
Max. Port	10	12	2	2
Gigabit Ethernet Port	8	10	1	1
Fast Ethernet Port	-	-	-	-
100/1000Tx SFP Port	2	-	1	1
1000Tx SFP Port	-	2	-	-
Fix Fiber Port	-	-	-	-
PoE Ports (802.3at)	8	8	-	1 (Up to 60W)
PoE Ports (802.3bt)	-	-	-	-
<b>Mechanism</b>				
Enclosure	Aluminum	Aluminum	Aluminum	Aluminum
Protection Class	IP30	IP30	IP30	IP30
Dimensions(mm)	50x120x100	72x145x118	24x131x97	24x130x97
Weight(kg)	0.67 kg	0.75 kg	0.3 kg	0.31 kg
Mounting	DIN-Rail,Wall	DIN-Rail,Wall	DIN-Rail,Wall*	DIN-Rail,Wall*
<b>Environment</b>				
Operating Temperature	-40°C to 85°C (-40°F to -185°F)			
Storage Temperature	-40°C to 85°C (-40°F to -185°F)			
<b>Network Redundancy</b>				
STP/RSTP	-	-	-	-
MSTP	-	-	-	-
ERPS	-	-	-	-
MRP	-	-	-	-
Port Trunking / LACP	-	-	-	-
<b>Software Feature</b>				
<b>Layer 3 Feature</b>				
Static Routing	-	-	-	-
OSPFv2	-	-	-	-
RIP v1/v2	-	-	-	-
<b>Switch Property</b>				
Jumbo Frame Support	9600bytes	9600bytes	-	-
MAC Table Size	8K	8K	-	-
Packet Buffer Size	4 Mbits	4 Mbits	-	-
Power Input	48 - 57VDC	12 - 57VDC	12 - 56VDC	44 - 57VDC
Power Consumption (Sys.)	10W	14W	10W	10W
PoE Power Budget	240W	240W	-	60W
<b>Certification</b>				
CE / FCC	✓	✓	✓	✓
UL	✓	✓	✓	✓
IEC61000-6-2 / -6-4	✓	✓	✓	✓

E