

# KY-3170™ XM / DYMEC 3170™ Series

6 x 4 Port, Managed, Ten Gigabit, Temperature Hardened, ITS, Industrial, Input File, Ethernet Switch with 4- 1/10 GbE Uplinks – Low Power / NSA End Point Certified with ERPSv2



- **6 x RJ45 Gigabit Ports**
- **4x 1GbE /10 GbE SFP Slots**
- **Protection – IP30 / Fanless, Convection Cooled**
- **NSA Network Endpoint Guideline Certified for Console Port Shutdown and Chassis Full Security (Patent Pending)**
- 5 Year / Limited Lifetime Warranty
- Input File / Low Power Industrial Ethernet Switch
- Built for harsh environments & wide temperature ranges
- Edge Computing & Transport Networks
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS / DSCP Advanced Queueing
- Supports IGMP Snooping v1/v2/v3, up to 1024 groups
- DHCP Relay Option 82 Policy for IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection / Broadcast Storm Suppression
- USB storage for configuration-free replacement
- Supports industrial automation protocols Ethernet/IP and Modbus TCP
- Secure File Transfer Protocol (SFTP) & Trivial File Transfer Protocol (TFTP)



## Specifications

### Technology

- IEEE 802.3 10BaseT
- IEEE 802.3u 100BaseTX
- IEEE 802.3ab 1000BaseT
- IEEE 802.3ae 10GBase over Fiber
- IEEE 802.3x Flow Control
- IEEE 802.3ad/802.1AX LACP
- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1w Rapid STP

### Standards

- IEEE 802.1s Multiple STP
- ITU-T G.8032 / Y.1344 ERPS
- IEEE 802.1Q VLAN Tagging
- IEEE 802.1ad Stacked VLANs
- IEEE 802.1p Class of Service
- IEEE 802.1X Network Authentication
- IEEE 802.1AB LLDP

### Processing Type

Store and Forward

**Switch Properties**

Priority Queues	8 Queues
Jumbo Frame	16000bytes
MAC Table Size	16K
VLAN Table Size	4094
IGMP Group	1024
Packet Buffer	12Mbits

**Software Features**

Network Redundancy	RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP
Security	802.1X, RADIUS, TACACS+, SSL, SSH, ACL*
Management	IPv4, IPv6, Web, Telnet, Serial Console, CLI, SFTP, SNMP v1/v2c/v3, uPnP
Diagnostics	RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP, DDM, Fiber & Copper Cable Diagnostics
Configuration	DHCP Server/Client, Relay Option 82, TFTP, SFTP, USB
Filter	802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning, MLDv1/v2 Snooping*
Time Sync.	NTP
QoS	CoS, DSCP, WRR/SPQ Queuing, Storm Protection
Industrial Profiles	Ethernet/IP, Modbus TCP

**Interfaces**

RJ45 Ports	6 x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X
Fiber Ports	4 x 1/10 GbE SFP Slots
LED Indicators	<b>Per unit:</b> PWR1, Fault, Ring Master, Ring State <b>Ports:</b> Link/Active with highest speed(Green), low speed(Amber)
Button	Multiple function reset button
Serial Console	1 x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1
Storage	1 x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog

**Power Requirements**

Operation Voltage	12-48 Volts DC
Connection	PCB Golden Finger
Power Consumption	<a href="#">0.67A@24</a> Volts DC
Protection	Overload Current Protected, Reverse Polarity Protected

**Mechanical Construction**

Enclosure	Military Grade Steel / Aluminum
Protection Class	IP30
Dimensions	58 x 114 x 205 mm (W x H x D)
Weight	0.87 kg
Mounting	Rack Mounting with Rail Slots

**Environmental Limits**

Operating Temperature	Extended: -40°C ~ 80°C (-40°F ~ 176°F)
Storage Temperature	-40°C ~ 85°C (40°F ~ 185°F)
Ambient Relative Humidity	5 to 95%, (Non-Condensing)

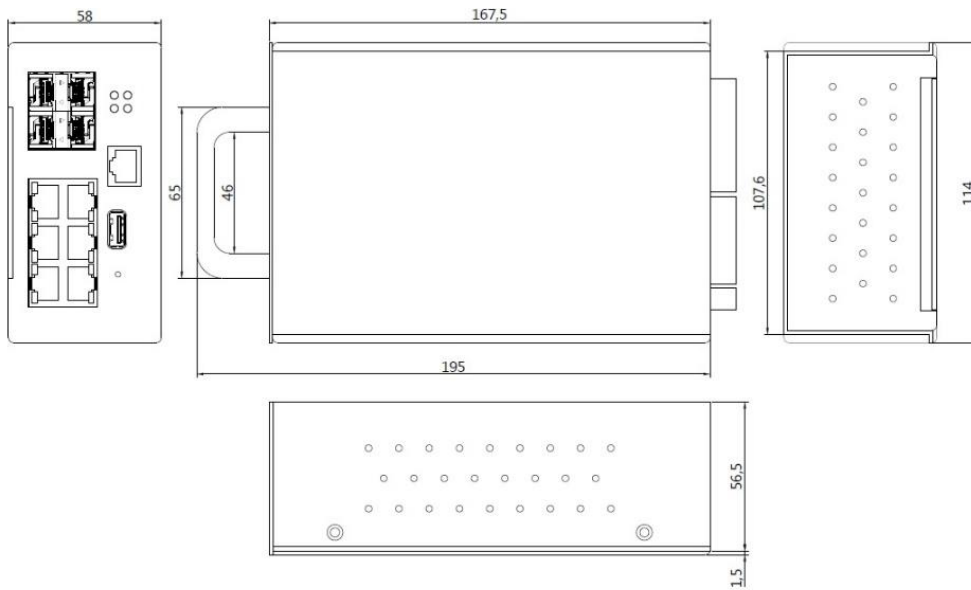
**Regulatory Approvals**

Altitude – GB4943.1-2011	0 ~ 5000 Meters
EMI	FCC Part 15 Subpart B Class A CE EN 55032 Class A
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (Surge) IEC61000-4-6 (CS) IEC61000-4-8 (Magnetic Field)
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Green	RoHS Compliant
Certifications	UL 60950-1/62368 61000-6-2 / FCC / NEMA TS-2 61000-6-4 / ITUT / IEEE
MTBF MIL-HDBK-217 IEC 62380	>167,000 hours
Warranty	5 Years / Limited Lifetime

Note from DYMEC development.

In a continuing effort of improvement and updated technology, product specifications are subject to change without notice.

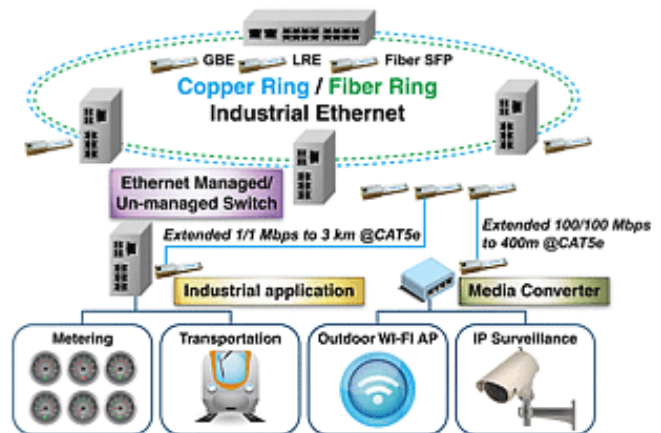
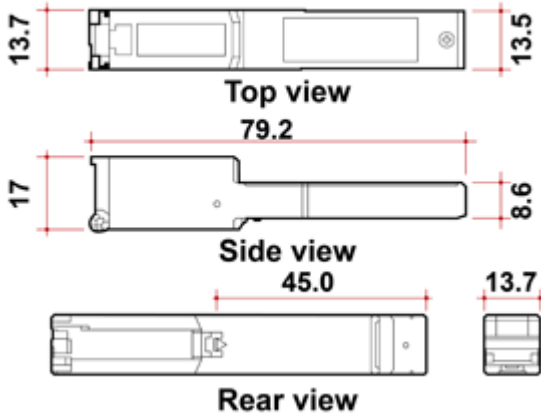
## Dimensions (unit = mm)



**DYMEC 3170 Supports: 2 & 4 Wire LONG RANGE ETHERNET / VDSL2 SFP Modem**  
 With long reach coverage, high noise immunity, and compact board size, **DYMEC KY-Pro-180-CRD Ruggedized** SFP modem is an ideal upgrade for your Enterprise or Industry applications. Used in Pairs.

### VDSL2 – Long Range Ethernet Application (KY-Pro-180-CRD)

#### MECHANICAL DIMENSIONS (Units in mm)



### DYMEC KY-SFP-T

Copper SFP Transceiver – Used to Add Additional RJ-45 Copper Ports to your KY-3170 Series Switch  
 Easy to Install & Configure – GUI Selectable

## Ordering Information

**KY-3170™ XM** 6 x 4 Port, Industrial, Managed, 10GbE, ITS Ethernet Switch with 4 x 1 / 10 GbE Uplinks  
- 6 x 10/100/1000BaseT(X) + 4 x 1 /10 GbE SFP Slots  
- Operating Temperature: -40°C ~ 80°C (-40°F ~ 176°F)

**DYMEC 3170™ Series** NSA Guideline Certified for Console Port Shutdown and Chassis Full Security

**KY-3170™ XM/2** 6 x 4 Port, Industrial, Managed, 1 / 10GbE, ITS Ethernet Switch with 4 x 1 / 10 GbE Uplinks (Configured 8 Copper RJ45 Ports)

**DYMEC 3170™ Series** - 6 x 10/100/1000BaseT(X) + 2 x 10/100/1000 Copper SFP + 2 x 1 /10 GbE SFP Slots  
- Operating Temperature: -40°C ~ 80°C (-40°F ~ 176°F)

NSA Guideline Certified for Console Port Shutdown and Chassis Full Security



**DYMEC** – Temperature Hardened, American Made, Ruggedized, NSA Certified Endpoint, Industrial Ethernet Switches / Routers for SCADA, ITS, Transportation, Automation, Power Utilities, Edge Computing, AI and Industrial Control Systems. Made in USA. TAA Compliant. Uses SFP's / BiDi SFP's / Mini Gbic & VDSL2 Industrial SFP for Long Range Ethernet



### Service Control

HTTP	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
HTTPS	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
SSH	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
Telnet	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
Console	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
Reset-Button	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable

Apply