KY-3170™EM4 / DYMEC 3170™ Series

6x4 Port, Managed, Gigabit, Temperature Hardened, ITS, Industrial, Input File, Ethernet Switch – Low Power / NSA Endpoint Certified with ERPsv2

- **6x Gigabit Ethernet ports**
- **4x 1000 Mbps SFP Slot (Mini Gbic) / ERPS Multi Ring**

- **NSA Network Endpoint Guideline Certified for Console Port Shutdown and Chassis Full Security (Patent Pending)**

- Built for harsh environments and wide temperature range applications / Edge Computing
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Input File / Low Power Industrial Ethernet Switch
- Supports IGMP Snooping v1/v2/v3, up to 1024 groups
- DHCP Relay Option 82 IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection / Broadcast Control
- USB storage for configuration-free replacement
- Supports industrial automation protocols Ethernet/IP & Modbus TCP
- Secure File Transfer Protocol (SFTP) & Trivial File Transfer Protocol (TFTP)

Specifications

Technology

Standards	IEEE 802.3 10BaseT
	IEEE 802.3u 100BaseTX
	IEEE 802.3ab 1000BaseT
	IEEE 802.3z 1000BaseX
	IEEE 802.3x Flow Control
	IEEE 802.3ad/802.1AX LACP
	IEEE 802.1D Spanning Tree Protocol
	IEEE 802.1w Rapid STP
	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	1023
Packet Buffer	12Mbits

Software Features

Network Redundancy	RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP
Security	802.1X, RADIUS, TACACS+, SSL, SSH, ACL / Security ACL Package
Management	IPv4, IPv6, Web, Telnet, Serial Console, CLI, SFTP, SNMP v1/v2c/v3, uPnP
Diagnostics	RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP, DDMI, Cable Diagnostic*
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
Time Sync.	NTP
QoS	CoS, DSCP, WRR/SPQ Queuing, Storm Protection, Broadcast Control
Industrial Profiles	Ethernet/IP, Modbus TCP

Switch Interfaces

RJ45 Port	6 x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X
Fiber Port	4 x 1000 Mbps SFP Slots
LED Indicators	**Per unit:** PWR1, Fault, Ring Master, Ring State **Ports:** Link/Active with highest speed(Green), low speed(Amber)
Button	Multiple functions 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 ~ 24 ~48 Volts DC
Connection	PCB Golden Finger
Power Consumption	0.58A@24 Volts DC

Protection	Overload Current Protected, Reverse Polarity Protected

Mechanical Construction

Enclosure	Metal / Military - Structural Grade
Protection Class	IP30
Dimensions	58 x 114 x 205 mm (W x H x D)
Weight	0.87 kg
Mounting	Input File / Rack Mount with Rail Slots

Environmental Limits

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Operating Temperature	-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	>177,000 hours
Warranty	5 Years / Limited Lifetime
TAA Compliant	Certified TAA Compliant

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

Email: **sales@DYMEC.com**
Web: **DYMEC.com**

Dimensions (unit = mm)
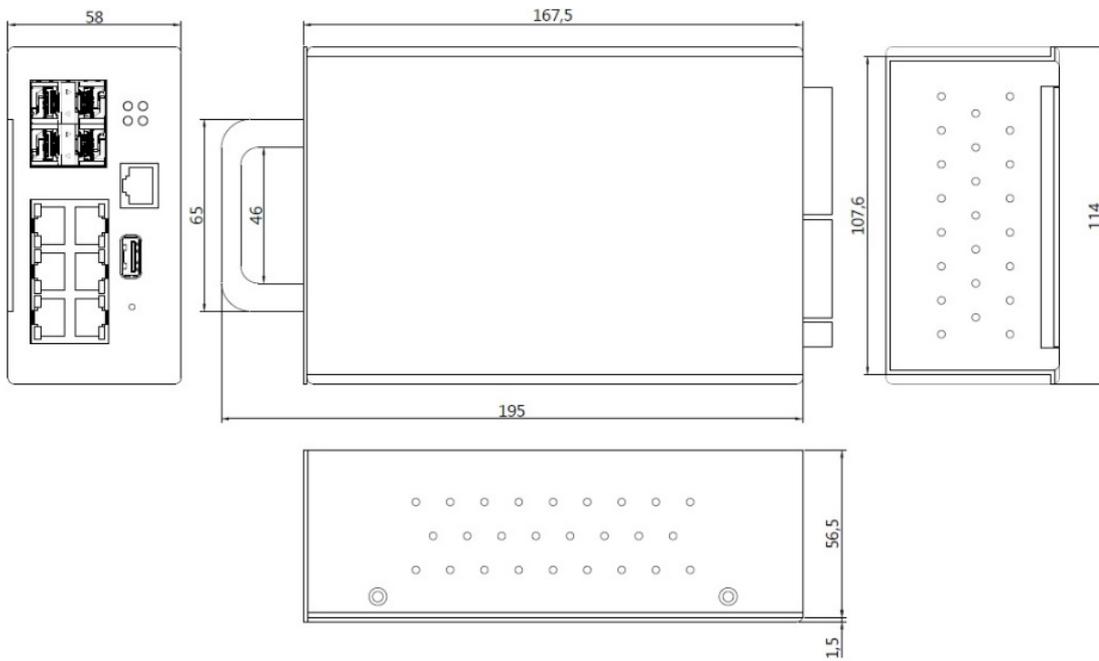
DYMEC 3170 Supports: 2 & 4 Wire LONG RANGE ETHERNET / VDSL2 SFP Modem

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)
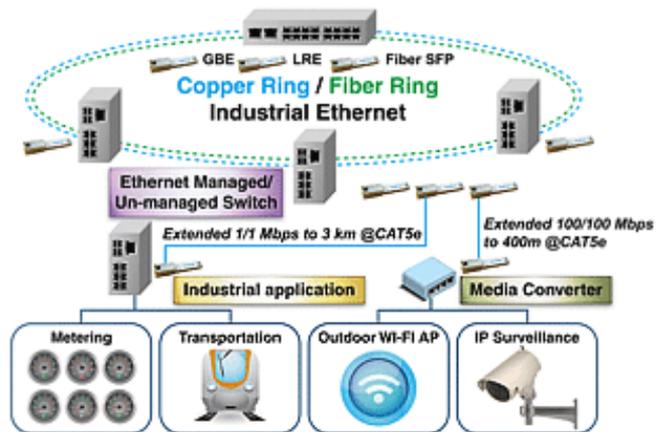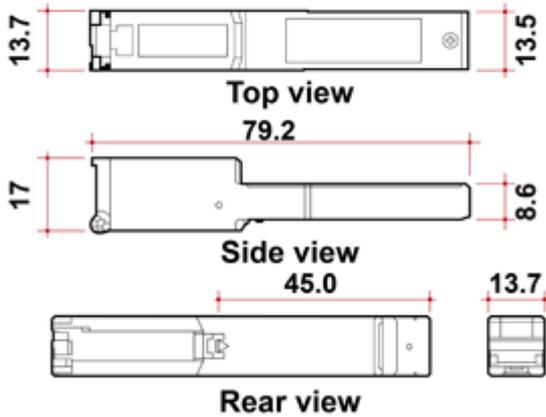
DYMEC KY-SFP-T

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™EM4

DYMEC 3170™ Series

6+4 Port, Industrial, Managed, Gigabit Ethernet ITS Switch
 - 6 x 10/100/1000T(x) + 4 x 1000 SFP Slots / ERPS
 - Operating Temperature: -40°C ~ 80°C (-40°F ~ 176°F)
NSA Guideline Certified for Console Port Shutdown and Chassis Full Security

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KY-3170™EM4/2

DYMEC 3170™ Series

6+4 Port, Industrial, Managed, Gigabit Ethernet ITS Switch (Configured 8 Copper RJ45 Ports)
 - 6 x 10/100/1000T(x) + 2 x 10/100/1000 Copper SFP + 2 x 1000 SFP Slot / ERPS
 - 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. Cyber-Secure, TAA Compliant. Uses SFP's / BiDi SFP's / Mini Gbic & VDSL2 Industrial SFP for Long Range Ethernet.**

⚙ Service Control

	Enable	Disable
HTTP	● Enable	○ Disable
HTTPS	● Enable	○ Disable
SSH	● Enable	○ Disable
Telnet	● Enable	○ Disable
Console	● Enable	○ Disable
Reset-Button	● Enable	○ Disable

Apply