

KY-3170™ XR / DYMEC 3170™ Series

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



- 6 x (RJ45 10/100/1000) Gigabit Ports
- 4x 1GbE /10 GbE SFP Slots
- **NSA Network Endpoint Guideline Certified for Console Port Shutdown and Chassis Full Security (Patent Pending)**
- 5 Year / Limited Lifetime Warranty
- Full Line Speed Routing & Switching
- Input File / Low Power Industrial Ethernet Switch
- Built for harsh environments & wide temperature ranges
- Edge Computing & Transport Networks
- Fanless – Convection Cooled
- 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
 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

Standards

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

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|-------------------------------|---|
| Router Forwarding Rate | 10 Mbps / GRE Line Speed for Routing |
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Software Features

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|----------------------------|--|
| 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, 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, MLDv1/v2 Snooping* |
| Time Sync. | NTP IEEE 1588v2* |
| QoS | CoS, DSCP, WRR/SPQ Queuing, Storm Protection |
| Industrial Profiles | Ethernet/IP, Modbus TCP |
| L3 Routing | Static Routing, OSPF v2, GRE, IPsec |

Router Interfaces

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|-----------------------|--|
| RJ45 Port | 6 x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X |
| Fiber Port | 4 x 1GbE 1/10 GbE SFP Slots |
| LED Indicators | Per unit: PWR1, Fault, Ring Master, Ring State Ports: 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

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|--------------------------|----------------|
| Operation Voltage | 12-48 Volts DC |
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|--------------------------|--|
| Connection | PCB Golden Finger |
| Power Consumption | 0.67A@ 24 Volts DC |
| Protection | Overload Current Protected, Reverse Polarity Protected |

Mechanical Construction

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|-------------------------|---------------------------------|
| 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

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|----------------------------------|--|
| 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) |

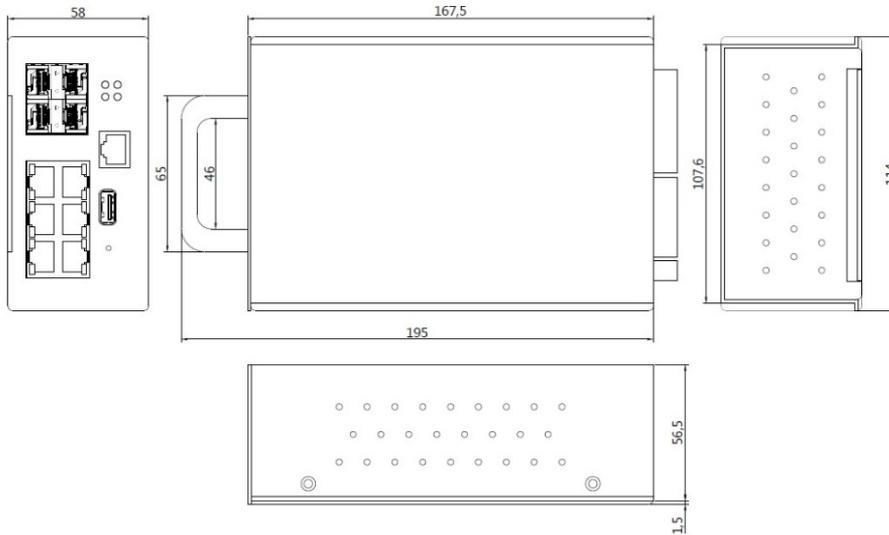
Regulatory Approvals

| | |
|---|---|
| Altitude Certified 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 | >157,000 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.

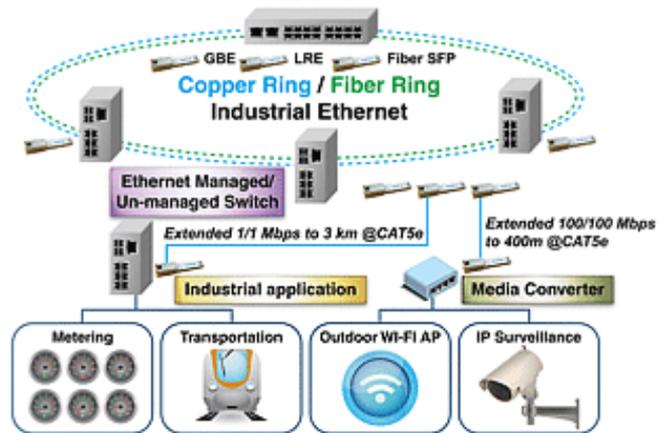
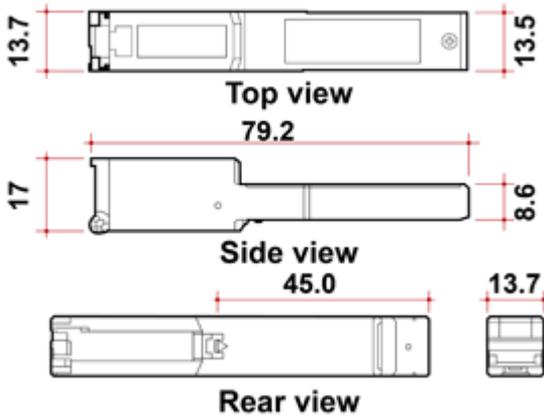
Dimensions (unit = mm)



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™XR

6 x 4 Port, 10GbE, Industrial, Managed, ITS, Ethernet Router 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™XR/2

6 x 4 Port, 10GbE, Industrial, Managed, ITS, Ethernet Router with 4 x 1 / 10 GbE Uplinks (Configured for 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

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|--------------|---|-------------------------------|
| 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