

CS-0804X

8+4 Port Industrial Managed L3 Switch with 10G Uplink



- 8x Gigabit Ethernet ports
- 4x 1/10 Gigabit Ethernet SFP+ Slot
- Built for harsh environments and wide temperature range application
- RSTP, MSTP, ERPS, LACP for Network Redundancy
- QoS CoS/DSCP to increase determinism
- Supports IGMP Snooping v1/v2/v3, up to 512 groups
- DHCP Relay Option 82 for policies IP address assignment
- SNMP v1/v2c/v3 for network management
- Supports Storm Protection
- USB storage for configuration-free replacement
- Supports industrial automation protocols Ethernet/IP and Modbus TCP

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
- IEEE 802.1X Network Authentication
- IEEE 802.1AB LLDP
- IEEE 1588 PTP

Standards

Processing Type Store and Forward

Switch Properties

| | |
|------------------------|-----------|
| Switch Fabric | 96Gbps |
| Priority Queues | 8 Queues |
| Jumbo Frame | 9216bytes |
| MAC Table Size | 16K |
| Packet Buffer | 12Mbits |
| VLAN Table Size | 4094 |
| IGMP Group | 512 |
| ACL Group | 512 |

VLAN IP Entries 64

Routing Entries (IPv4/IPv6) 512/256 host, 64/64 LPM

Software Feature

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|----------------------------|---|
| Network Redundancy | RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP |
| Security | 802.1X, RADIUS, TACACS+, SSL, SSH |
| Management | IPv4, IPv6, Web, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP |
| Diagnostics | RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP |
| Configuration | DHCP Server/Client, Relay Option 82, TFTP, USB |
| Filter | 802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning |
| Time Sync. | NTP, IEEE1588v2 OC (Software Timestamp), BC (Software Timestamp), TC (Hardware Timestamp) |
| QoS | CoS, DSCP, WRR/SPQ Queuing, Storm Protection |
| Industrial Profiles | Ethernet/IP, Modbus TCP |
| L3 Switching | Static Routing, RIP v1/v2, OSPF v2, VRRP v2 |

Interface

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|-----------------------|--|
| RJ45 Port | 8x 10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X |
| Fiber Port | 4x 1/10 Gigabit Ethernet SFP+ Slot |
| LED Indicators | Per unit: PWR1, PWR2, Fault, Ring Master, Ring State Ports: Link/Active with highest speed(Green), low speed(Amber) |
| Alarm Contact | 1x relay output with current carrying capacity of 1A @ 24 VDC |
| Digital Inputs | 1x isolated input from the electronics. +13 to +30V for state "1" -30 to +3V for state "0" Max. input current: 8mA |
| Button | Multiple functions reset button |
| Serial Console | 1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1 |
| Storage | 1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog |

Power Requirements

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|--------------------------|--|
| Operation Voltage | 12-48VDC, redundant dual inputs |
| Connection | 1x removable 4-contact terminal block |
| Power Consumption | 15W |
| Protection | Overload Current Protected, Reverse Polarity Protected |

Mechanical Construction

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|-------------------------|-----------------------|
| Enclosure | Aluminum |
| Protection Class | IP30 |
| Dimensions | 72x145x118 mm (WxHxD) |

Features with star(*) implies those are under development.

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

| | |
|-----------------|--|
| Weight | kg |
| Mounting | DIN-Rail Mounting, Optional Wall Mounting Kits |

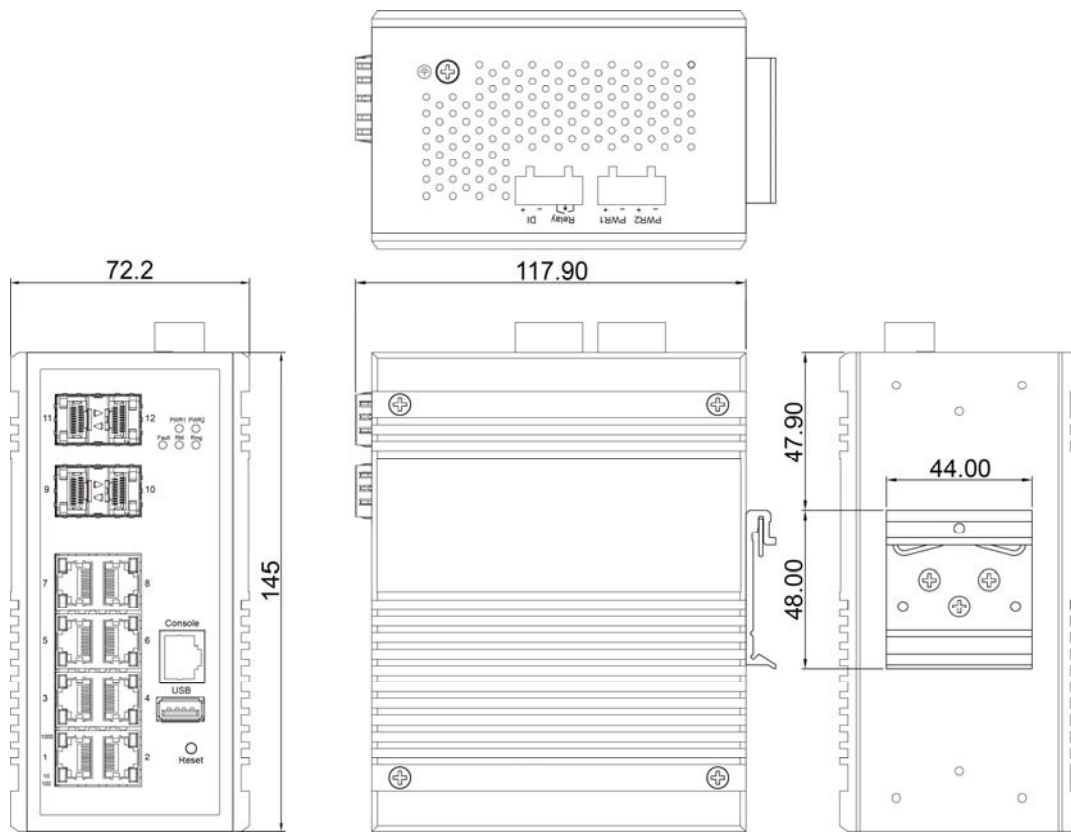
Environmental Limits

| | |
|----------------------------------|--|
| Operating Temperature | Standard: -10°C ~ 60°C (14°F ~ 140°F) Extended: -40°C ~ 75°C (-40°F ~ 167°F) For 10G SFP+: -40 ~ 60°C (32°F ~ 140°F) |
| Storage Temperature | -40°C ~ 85°C (-40°F ~ 185°F) |
| Ambient Relative Humidity | 5 to 95%, (Non-Condensing) |

Regulatory Approvals

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|-----------------------|---|
| EMI | 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 | IEC 61000-6-2 IEC 61000-6-4 EN 50121-4 |
| MTBF | >100,000 hours |
| Warranty | 5 Years |

Dimensions (unit = mm)



Ordering Information

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|-------------------|---|
| CS-0804X | 8+4 Port Industrial Managed L3 Switch with 10G Uplink - 8x 10/100/1000T(x) + 4x 1/10 Gigabit Ethernet SFP+ Slot - Operating Temperature: -10°C ~ 60°C (14°F ~ 140°F) |
| CS-0804X-T | 8+4 Port Industrial Managed L3 Switch with 10G Uplink - 8x 10/100/1000T(x) + 4x 1/10 Gigabit Ethernet SFP+ Slot - Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F) For 10G SFP+: -40 ~ 60°C (-40°F ~ 140°F) |

Optional Accessories

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|------------------|--|
| MDR-20-24 | Industrial DIN-Rail Power Supply with 24VDC Output, provide max. 20W Power |
| MDR-40-48 | Industrial DIN-Rail Power Supply with 48VDC Output, provide max. 40W Power |
| MDR-60-48 | Industrial DIN-Rail Power Supply with 48VDC Output, provide max. 60W Power |