



- 8x Gigabit Ethernet ports with 4x IEEE 802.3at PoE+ and 2x IEEE 802.3bt 60W PoE++
- 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
- Supports PoE PD Alive Check Function for PoE Device Power Recycle

Specifications

Technology

Standard

IEEE 802.3 10BaseT
 IEEE 802.3u 100BaseTX
 IEEE 802.3ab 1000BaseT
 IEEE 802.3x Flow Control
 IEEE 802.3az Energy-Efficient Ethernet

IEEE 802.3af Power over Ethernet
 IEEE 802.3at PoE+
 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

Processing Type

Store and Forward

Switch properties

Switch Fabric 96Gbps
Priority Queues 8 Queues
Jumbo Frame 9216bytes
MAC Table Size 16K
VLAN IP Entries 64

Packet Buffer 12Mbits
VLAN Table Size 4094
IGMP Group 512
ACL Group 512
Routing Entries (IPv4/IPv6) 512/256 host, 64/64 LPM

Software Feature

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), TC (Hardware Timestamp)
QoS CoS, DSCP, WRR/SPQ Queuing, Storm Protection
PoE Powering Status, PoE Monitoring, Scheduling, PD Alive Check
Industrial Profiles Ethernet/IP, Modbus TCP, Profinet
L3 Routing NAT

Interface

RJ45 Ports	8x 10/100/1000T(x) with 4x PoE+ and 2x PoE++, auto negotiation speed duplex mode, auto MDI/MDI-X	Digital Inputs	1x isolated input from the electronics. +13 to +30V for state "1" -30 to +3V for state "0" Max. input current: 8mA
Fiber Port	4x 1/10 Gigabit Ethernet SFP+ Slot	Button	Multiple functions reset button
LED Indicators	Per unit: PWR1, PWR2, Fault, Ring Master, Ring State Ports: Link/Active with highest speed(Green), low speed(Amber) PoE: Output Power	Serial Console	1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1
Alarm Contact	1x relay output with current carrying capacity of 1A @ 24 VDC	Storage	1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog
PoE Pin Out	V+, V+, V-, V-, for pin 1, 2, 3, 6, Endspan, MDI Mode A		

Power Requirements

Operation Voltage	50-57VDC, redundant dual inputs, >50VDC for PoE+ output recommended	Protection	Overload Current Protected, Reverse Polarity Protected
Connection	1x removable 4-contact terminal block	PoE Power Budget	Max. 240 W for total PD consumption, Max. 60W per PoE port
Power Consumption	0.36A@50VDC without PDs' consumption		

Mechanical Construction

Enclosure	Aluminum	Weight	0.90 kg
Protection Class	IP30	Mounting	DIN-Rail Mounting, Optional Wall Mounting Kits
Dimensions	72x145x118 mm (WxHxD)		

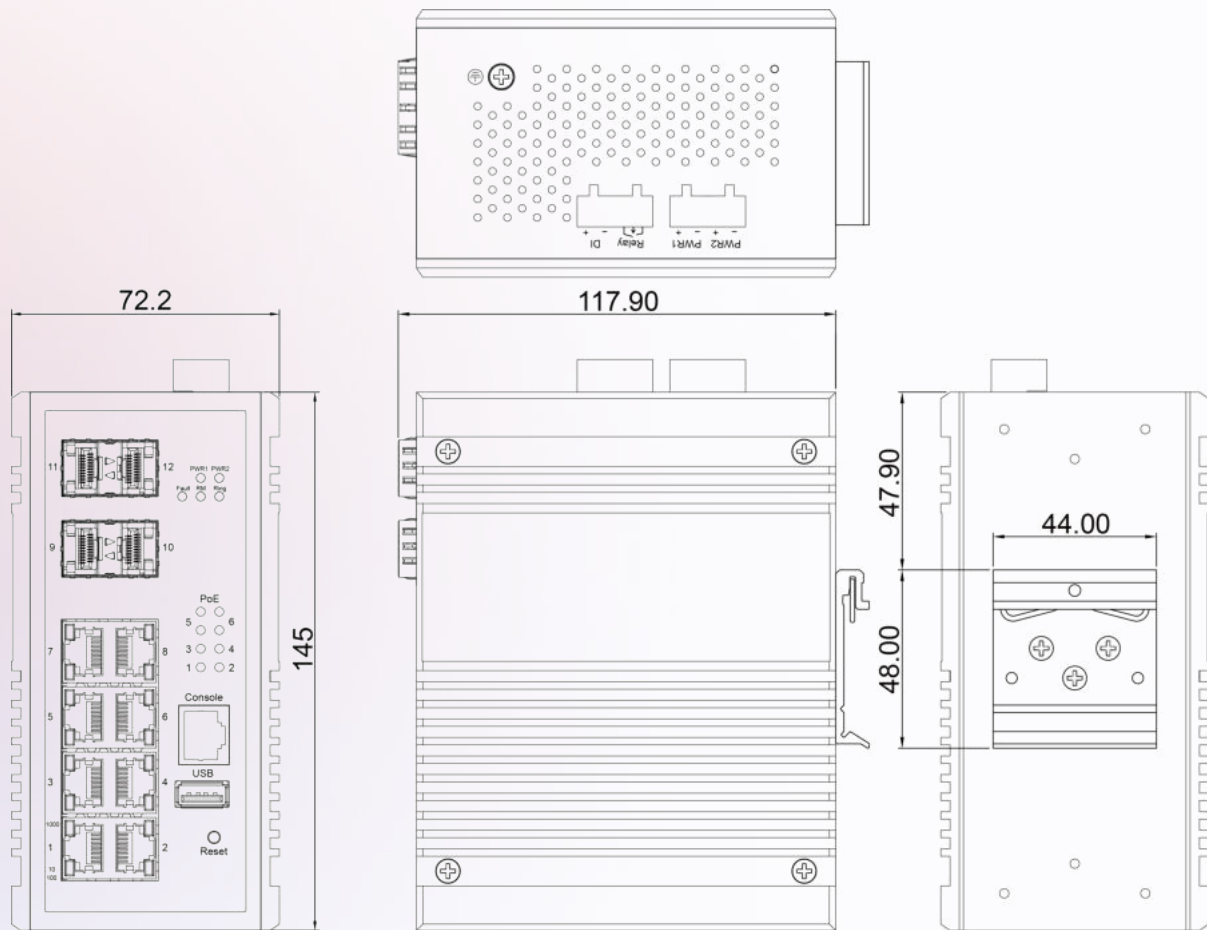
Environmental Limits

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

Regulatory Approvals

EMI	CE EN 55032 Class A	Vibration	IEC60068-2-6
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)	Green	RoHS Compliant
Free Fall	IEC60068-2-32	Certifications	UL 60950-1/62368 (Pending) IEC 61000-6-2 IEC 61000-6-4
Shock	IEC60068-2-27	MTBF	>100,000 hours
		Warranty	5 Years

Dimensions (unit = mm)



Ordering Information

Available Models

- CH-0804X2-T** 8+4 Port Industrial Managed PoE+ L3 Switch with 10G Uplink
- 8x 10/100/1000T(x) with 30W PSE + 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

NDR-240-48 240W Industrial DIN-Rail Power Supply, 48VDC (metal case)

NDR-480-48

480W Industrial DIN-Rail Power Supply, 48VDC (metal case)