

CT-1002G

10+2 Port Industrial Managed PoE+ Booster Gigabit L3 Switch



- 10x Gigabit Ethernet ports with 8x IEEE 802.3at PoE+
- 2x 100/1G/2.5GF(x) 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
- Power Boost for PoE+

Specifications

Technology

- IEEE 802.3 10BaseT
- IEEE 802.3u 100BaseTX
- IEEE 802.3ab 1000BaseT
- IEEE 802.3z 1000BaseX
- IEEE 802.3x Flow Control
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at PoE+
- IEEE 802.3az Energy-Efficient Ethernet
- 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 24Gbps
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

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
PoE	Powering Status, PoE Monitoring, Scheduling, PD Alive Check

Industrial Profiles	Ethernet/IP, Modbus TCP, Profinet
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L3 Switching	Static Routing, RIP v1/v2, RIPng, OSPF v2, OSPF v3, VRRP v2
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Interface

RJ45 Port	10x 10/100/1000T(x) with 8x PoE+, auto negotiation speed duplex mode, auto MDI/MDI-X
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Fiber Port	2x 100/1G/2.5GF(x) SFP Slot
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PoE Pin Out	V+, V+, V-, V-, for pin 1, 2, 3, 6, Endspan, MDI Mode A
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LED Indicators	Per unit: PWR1, PWR2, Fault, Ring Master, Ring State Ports: Link/Active with highest speed(Green), low speed(Amber) PoE: Output Power
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Alarm Contact	1x relay output with current carrying capacity of 1A @ 24 VDC
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Digital Inputs	1x isolated input from the electronics. +13 to +30V for state "1" -30 to +3V for state "0" Max. input current: 8mA
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Button	Multiple functions reset button
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Serial Console	1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1
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Storage	1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog
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Power Requirements

Operation Voltage	12-57VDC, redundant dual inputs, >50VDC for PoE+ output recommended
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Connection	1x removable 4-contact terminal block
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Power Consumption	0.90A@24VDC without PDs' consumption
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PoE Power Budget	Max. 30 W per PoE port. Max. total output power for PD: 190W@24V input,
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	90W@12V input.
Protection	Overload Current Protected, Reverse Polarity Protected

Mechanical Construction

Enclosure	Aluminum
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Protection Class	IP30
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Dimensions	72x145x118 mm (WxHxD)
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Weight	0.88 kg
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Mounting	DIN-Rail Mounting, Optional Wall Mounting Kits
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Environmental Limits

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

EMI	CE EN 55032 Class A
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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)
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Free Fall	IEC60068-2-32
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Shock	IEC60068-2-27
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Vibration	IEC60068-2-6
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Green	RoHS Compliant
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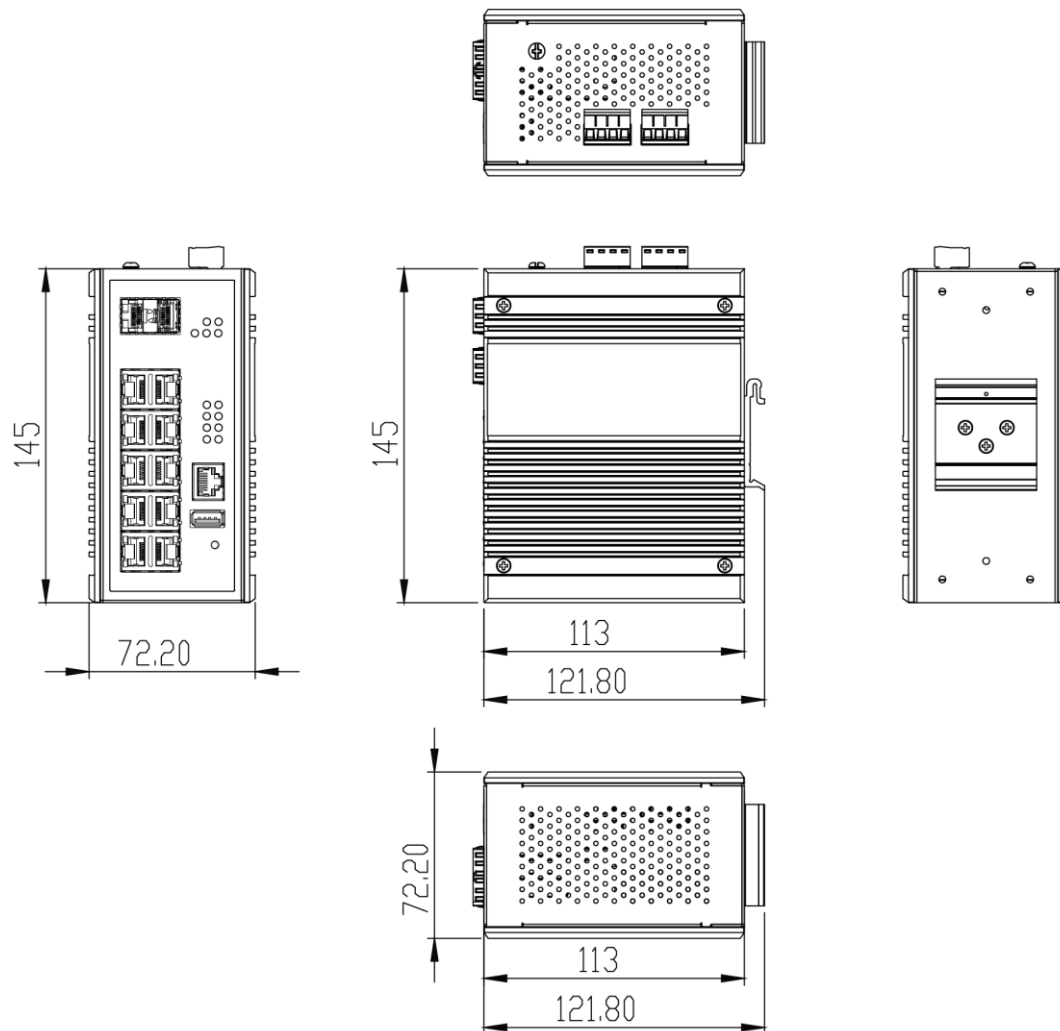
Certifications	IEC 61000-6-2 IEC 61000-6-4 EN 50121-4
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MTBF	>100,000 hours
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Warranty	5 Years
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Features with star(*) implies those are under development. In a continuing effort of improvement and updated technology, product specifications are subject to change without notice.

Dimensions (unit = mm)



Ordering Information

CT-1002G	10+2 Port Industrial Managed PoE+ Booster Gigabit L3 Switch - 10x 10/100/1000T(x) with 8x 30W PSE + 2x 100/1G/2.5GF(x) SFP Slot - Operating Temperature: -10°C ~ 60°C (14°F ~ 140°F)
CT-1002G-T	10+2 Port Industrial Managed PoE+ Booster Gigabit L3 Switch - 10x 10/100/1000T(x) with 8x 30W PSE + 2x 100/1G/2.5GF(x) SFP Slot - Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)

Optional Accessories

NDR-240-24	240W Industrial DIN-Rail Power Supply, 24VDC (metal case)
NDR-480-24	480W Industrial DIN-Rail Power Supply, 24VDC (metal case)