

CP-1002G

10+2 Port Industrial Managed PoE+ 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

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, DDM

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, PoE Priority

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| 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

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| 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

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| Operation Voltage | 48-57VDC, 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 | 0.35A@48VDC without PDs' consumption |
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| PoE Power Budget | Max. 240 W for total PD consumption, Max. 30 W per PoE port |
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| Protection | Overload Current Protected, Reverse Polarity Protected |
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Mechanical Construction

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

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| 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

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| 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 | UL 60950-1/62368 (Pending) EN 50121-4 |
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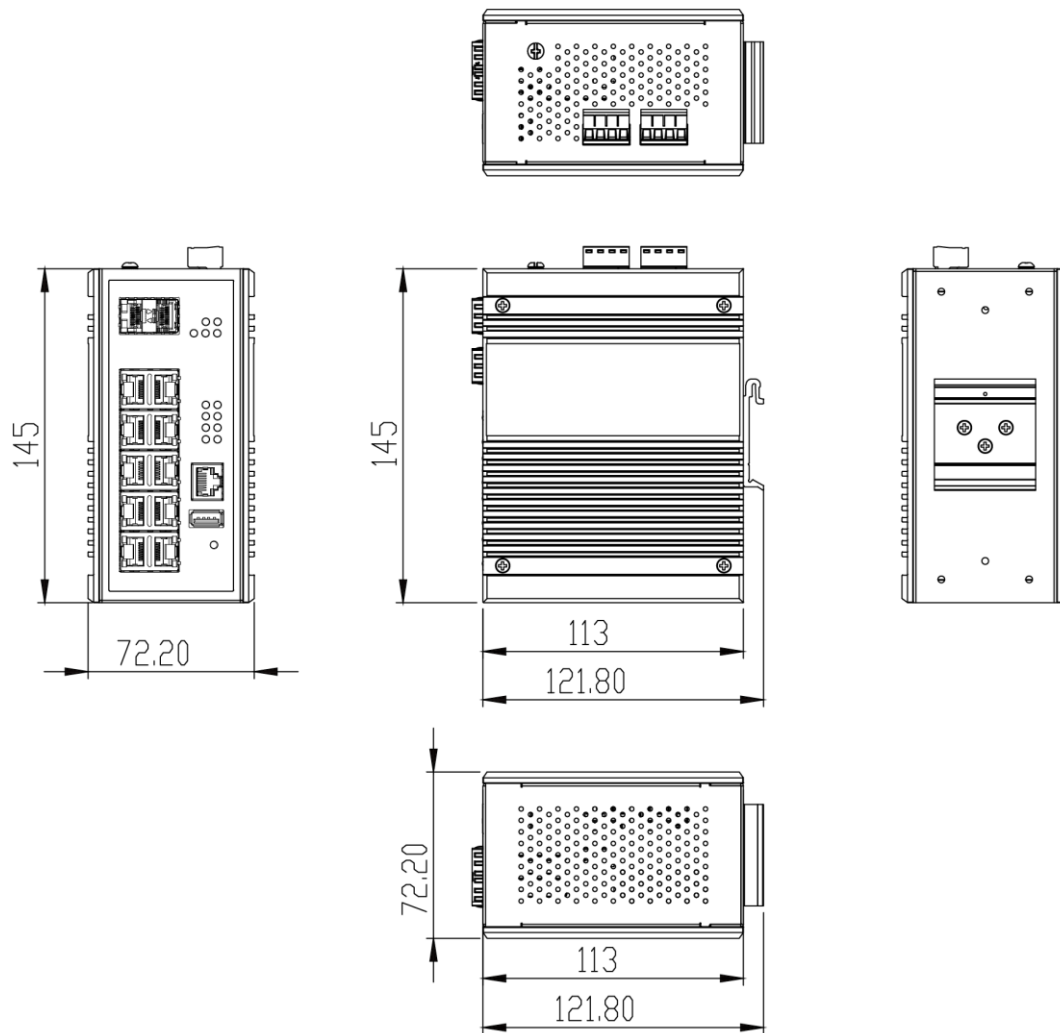
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| MTBF | >100,000 hours |
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| Warranty | 5 Years |
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Features with star(*) implies those are under development.

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

Dimensions (unit = mm)



Ordering Information

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

Optional Accessories

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| NDR-240-48 | 240W Industrial DIN-Rail Power Supply, 48VDC (metal case) |
| NDR-480-48 | 480W Industrial DIN-Rail Power Supply, 48VDC (metal case) |