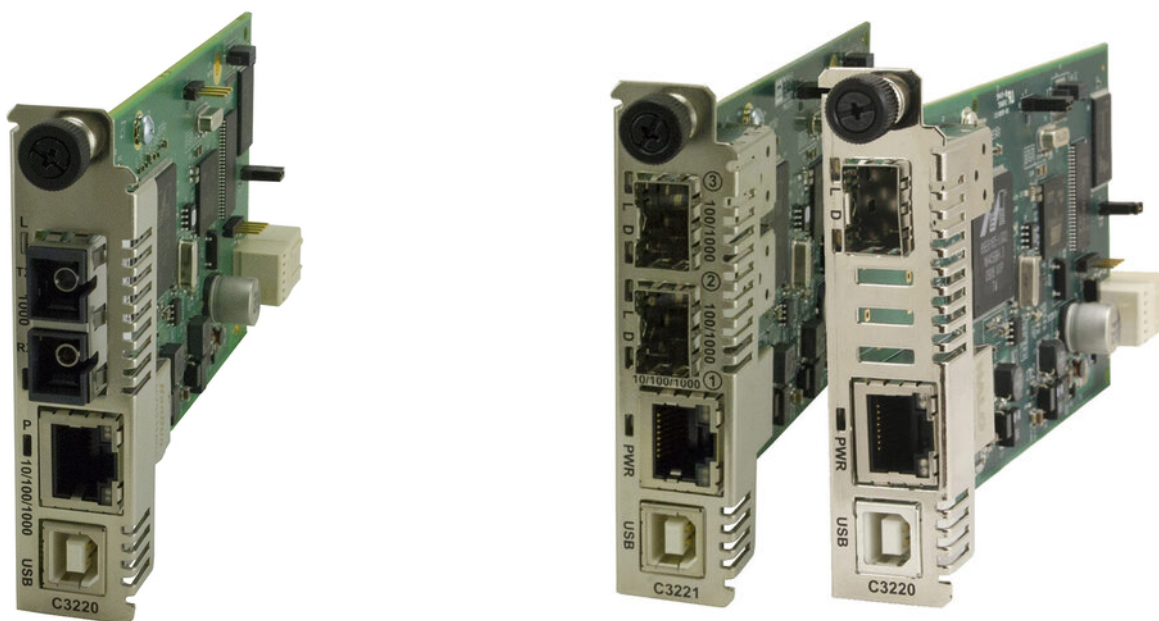


10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1310nm single mode (SC) [10 km/6.2 mi.] Link

Budget: 10.5 dB



## Direct Attach Cables / Active Optical Cables

A simple to install, cost-effective and interoperable solution

Often used for data center short-reach interconnects, Direct Attach, Active Copper and Active Optical Cables are an indispensable part of any network.

Terminated with transceiver-style connectors, they are designed to be used in the same ports as a typical SFP+ or QSFP transceiver, with no need for adapters or converters. Our DAC and AOC cables offer compatibility with a huge range of vendors, enabling the connectivity you need within the Top of Rack and End of Row environments.

- 10G, 25G, 40G & 100G product solutions
- Seamless interoperability with network equipment
- Multi-code options enabling different OEM vendors at each end of the cable
- 4x breakout cables, 40G QSFP+ to 4x 10G SFP and 100G QSFP28 to 4x 25G SFP28
- Fast Delivery, Custom solutions
- Compatible with Over 90 Systems
- Savings of up to 70%



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10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1310nm single mode (SC) [10 km/6.2 mi.] Link

Budget: 10.5 dB

The ION C3220 is a managed Network Interface Device (NID) module that provides an interface between 10/100/1000Base-T ports and 1000Base-SX/LX ports, allowing users to manage their links while integrating fiber optic cabling into 10/100/1000 copper environments. As a remotely managed device, the C3220 can be managed individually via an IP address or it can be managed by the ION Management Module when installed in a managed ION chassis. With advanced features like IEEE 802.3ah Link OAM, VLAN, QoS, SSH/SSL, jumbo frame support, and bandwidth allocation, the C3220 provides various methods for secure delivery of Ethernet services in business and mobile backhaul applications.

## Features

- MEF 9, 14 and 21 certified
- IEEE 802.3ah Link OAM
- 10K Jumbo Frame Support
- Two selectable Remote Management modes:
  - IP-Based Remote Management
  - In-Band (remote device managed by local peer)
- Auto-MDI/MDIX
- Auto-Negotiation
- Pause
- Transparent Link Pass Through
- Far-End-Fault (FEF)
- Remote Loopback
- Field Upgradeable Firmware
- IEEE 802.1p QoS packet classification
- IPv4 IP TOS, DiffServ and IPv6 traffic class QoS classification
- IEEE 802.1Q VLAN and double VLAN tagging with 4096 VIDs
- DHCP client
- SNTP
- TFTP
- RADIUS client
- RMON counters for each port
- Bandwidth profiling
- DMI Optical Management
- Cable diagnostic function for copper ports
- SSH
- Telnet
- Command Line Interface (CLI)

10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1310nm single mode (SC) [10 km/6.2 mi.] Link

Budget: 10.5 dB

- Web management
- Focal Point Management
- SNMP v1, v2c, and v3
- USB port for basic setup
- Management VLAN

## Technical Data

### Standards

- IEEE 802.3
- IEEE 802.3ah
- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.1X

### Data Rate

- Copper: 10/100/1000 Mbps
- Fiber: 1000 Mbps

### Filtering Addresses

- 8K MAC Addresses

### Max Frame Size

- 10,240 bytes

### Dimensions

- Width: 0.86" [22 mm]
- Depth: 6.5" [165 mm]
- Height: 3.4" [86 mm]

### Power Consumption

- 4.5 Watts

### Environment

10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1310nm single mode (SC) [10 km/6.2 mi.] Link

Budget: 10.5 dB

- Environment specs are dependent on the chassis chosen
- Operating: 0°C to 50°C
- Humidity: 5% to 95% (non-condensing)
- Altitude: 0 – 10,000 ft.

## Weight

- 1 lb. [0.45 kg]

## MTBF

- With Power Supply:
- Greater than 65,000 Hours (MIL-HDBK-217F)
- Greater than 178,000 Hours (Bellcore)

- Without Power Supply:
- Greater than 250,000 Hours (MIL-HDBK-217F)
- Greater than 687,500 Hours (Bellcore)

## Certifications

- EN55022 Class A, EN55024, CE Mark

## Warranty

- Lifetime

## Product variants & accessories

Art.-No.	Description
C3220-1014	10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1310nm single mode (SC) [10 km/6.2 mi.] Link Budget: 10.5 dB