100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1300nm multimode (ST) [2 km/1.2 mi.] Link Budget: 11.0 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
- $4 x$ breakout cables, 40 G QSFP+ to 4 x 10G SFP and 100G QSFP28 to 4 x 25G SFP28
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- Savings of up to $70 \%$
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100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1300nm multimode (ST) [2 km/1.2 mi.] Link
Budget: 11.0 dB

The ION C2110 is a media converter module that provides an interface between 100Base-TX ports and 100Base-FX ports, allowing users to integrate fiber optic cabling into 100Base-TX copper environments. Operating at Layer 1 , the physical layer, data is passed through the converter at line speed, making it ideal for applications where low latency is essential. The ION C2110 is a manageable device when installed in a managed ION chassis.

## Features

- Auto-Negotiation of speed and duplex on TP port
- Auto-MDI/MDIX on TP port
- Link Pass Through (LPT)
- Far-End-Fault (FEF) detection
- Automatic Link Restoration
- Pause advertisement
- Field Upgradeable Firmware
- Can be used in any ION Platform Chassis
- Standards based, will link with any Standard 100Base-TX and any Standard 100Base-FX ports


## Manageable Features

- Report converter status to chassis management software:
- TP and Fiber Link Status
- Hardware switch settings
- Copper Port Speed
- TP and Fiber Port Duplex
- Fault condition
- Write operation includes:
- Power on/off device
- Auto-Negotiation enable/disable
- Force 10 Mbps or 100 Mbps
- Force half or full-duplex
- Select advertising modes when
- Auto-Negotiation is enabled
- LPT enable/disable
- FEF enable/disable
- Pause enable/disable

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Note: Manageable Features are available when used in an ION Platform chassis along with an ION Management Module.

## Technical Data

## Standards

- IEEE 802.3


## Data Rate

- 100 Mbps , Layer 1


## Switch

- SW1: Auto-Negotiation (UP = enabled)
- SW2: Pause (UP=enabled)
- SW3: Link Pass Through (UP = enabled)
- SW4: Far-End-Fault (FEF) (UP = enabled)


## Internal Jumper

- Auto-MDI/MDIX: Enable/Disable


## Jumper

- Hardware: Mode of operation is determined by the settings on the 4-position switch
- Software: Mode of operation is determined by the most recently saved on-board microprocessor settings


## Status LEDs

- PWR (Power): ON = Connection to powered backplane
- LKC (Copper Link): ON = Copper Link
- RXC (Receive Copper): Blinking = Data received on Copper link
- LKF (Fiber Link): ON = Fiber Link
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- RXF (Receive Fiber): Blinking = Data received on Fiber Link


## Dimensions

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


## Power Consumption

- 2.5 Watts, 200 mA @ 13.9 VDC


## Environment

- Environment specs are dependent on the chassis chosen
- Operating: $0^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}$
- Humidity: $5 \%$ to $95 \%$ (non-condensing)
- Altitude: 0 - 10,000 ft.


## Weight

- $1 \mathrm{lb} .[0.45 \mathrm{~kg}]$


## MTBF

- Greater than 250,000 hours (MIL-HDBK-217F)
- Greater than 667,500 hours (Bellcore)


## Certifications

- CISPR/EN55022 Class A, FCC Class A, CE Mark


## Warranty

- Lifetime


## Product variants \& accessories

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100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1300nm multimode (ST) [2 km/1.2 mi.] Link Budget: 11.0 dB

| Art.-No. | Description |
| :--- | :--- |
| C2110-1011 | 100 Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1300nm multimode (ST) [2 km/1.2 mi.] Link Budget: |
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