C2210 Series

ION Fast Ethernet Media and Rate Converter Module

10/100Base-TX to 100Base-FX

C2210-1013

The ION C2210 is a media converter module that provides an interface between 10/100Base-TX ports and 100Base-FX ports, allowing users to integrate fiber optic cabling into 10/100 copper environments. Operating at Layer 2, the data link layer, this converter not only converts copper to fiber, it also provides rate conversion allowing legacy 10Base-T copper devices to connect to 100Base-FX fiber. The ION C2210 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
- Pause (Software Controlled)
- Automatic Link Restoration
- Field Upgradeable Firmware
- Can be used in any ION Platform Chassis
- Standards based, will link with any standard 10/100Base-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
  - Auto-MDI/MDIX enable/disable

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

Specifications

Standards	IEEE 802.3u IEEE 802.3x
Data Rate	10 Mbps; 100 Mbps Layer 2
MAC Address Table	1K
Frame Buffer Memory	512 Kbits
Max Frame Size	2048 bytes
Switches	SW1: Auto-Negotiation (UP = enabled) SW2: Forced 100 Mbps/10 Mbps with Auto-Neg. off (UP = 100 Mbps) SW3: Forced Full/Half-Duplex with Auto-Neg. off (UP = Full) SW4: Full/Half-Duplex on fiber port (UP = Full) SW5: Auto-MDI/MDIX on UTP (UP = enabled) SW6: Link Pass Through (UP = enabled)
Internal Jumpers	Auto-MDI/MDIX: Enable/Disable
Jumpers	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	FD (Fiber Duplex): ON= Full-duplex on fiber LACT (Fiber Link/Activity): ON = Fiber Link PWR (Power): ON=Connection to powered backplane (TP. Duplex/Link): Yellow = Half duplex, Green = Full-Duplex (TP. Speed): Yellow = 10Mbps, Green = 100 Mbps
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°C to 50°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	CISPR/EN55022 Class A, FCC Class A, CE Mark, EN55024
Warranty	Lifetime

Ordering Information

C2210-1011
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1300nm multimode (ST) [2 km/1.2 mi.] Link Budget: 11.0 dB

C2210-1013
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1300nm multimode (SC) [2 km/1.2 mi.] Link Budget: 11.0 dB

C2210-1039
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1300nm multimode (LC) [2 km/1.2 mi.] Link Budget: 11.0 dB

C2210-1014
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1310nm single mode (SC) [20 km/12.4 mi.] Link Budget: 16.0 dB

C2210-1019
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1310nm single mode (LC) [20 km/12.4 mi.] Link Budget: 17.3 dB

C2210-1040
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-X SFP Slot (empty)

Single Fiber Products

Recommended use in pairs

C2210-1029-A1
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1310nm TX/1550nm RX single fiber single mode (SC) [20 km/12.4 mi.] Link Budget: 19.0 dB

C2210-1029-A2
10/100Base-TX (RJ-45) [100 m/328 ft.] to 100Base-FX 1550nm TX/1310nm RX single fiber single mode (SC) [20 km/12.4 mi.] Link Budget: 19.0 dB

Optional Accessories (sold separately)

SFP Modules