

# C3210 Series

## ION Gigabit Ethernet Media and Rate Converter Module

### 10/100/1000Base-T to 1000Base-SX/LX



The ION C3210 is a media converter module that provides an interface between 10/100/1000Base-T ports and 1000Base-SX/LX ports, allowing users to integrate fiber optic cabling into 10/100/1000 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 10/100 copper devices to connect to 1000Base-SX/LX fiber. The ION C3210 is a manageable device when installed in a managed ION chassis.

## Features

- Copper and Fiber Auto-Negotiation
- Switch Selectable Speeds
- Auto-MDI/MDIX
- Link Pass Through
- Remote Fault Detect
- Pause
- Automatic Link Restoration
- IEEE 802.1p QoS, IPv4 TOS/DiffServ, IPv6 traffic class
- IEEE 802.1Q Port VLAN, tagging and doubling tagging (Q in Q)
- Field Upgradeable Firmware
- Virtual Cable Test on UTP port
- Unidirectional data transmission
- Bandwidth Allocation
- DMI, digital diagnostics per SFF-8472
- RMON counters for each port
- Can be used in any ION Platform Chassis
- Secure unidirectional transmission
- Standards based, will link with any standard 10/100/1000Base-T and any standard 1000Base-SX or -LX ports

## Specifications

Standards	IEEE 802.3 IEEE 802.3ab IEEE 802.3u IEEE 802.3z IEEE 802.1p IEEE 802.1Q
Data Rate	10/100/1000 Mbps; Layer 2
Max Frame Size	10,240 Bytes (jumbo frame support) 1,632 Bytes when linked to an xGFEB10xx-120
Switches	SW1: TP Auto-Negotiation SW2: TP Speed SW3: TP Duplex SW4: Link Pass Through SW5: Fiber Duplex SW6: Unused
Jumpers	Hardware/Software mode, Auto-MDI/MDIX
Status LEDs	PWR (Power): ON = Connection to powered backplane LACT (Fiber Link): ON=Fiber link, Blinking=activity UTP Duplex/Link: Orange=half duplex link, Blinking = half duplex activity, Green = Full duplex link, Blinking =Full duplex activity, Off = 10 Mbps operation (or no link), Orange = 100 Mbps operation, Green = 1000 Mbps operation
Dimensions	Width: 0.86" [22 mm] Depth: 6.5" [165 mm] Height: 3.4" [86 mm]
Power Consumption	3.6 Watts, 300mA @ 12 VDC
Environment	<b>Environment specs are dependent on the chassis chosen</b> 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, EN55024, EN61000, FCC Class A, CE Mark
Warranty	Lifetime

## Ordering Information

### C3210-1013

10/100/1000Base-T (RJ-45) [100 m] to 1000Base-SX 850nm multimode (SC) [62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.]  
Link Budget: 8.5 dB

### C3210-1039

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-SX 850nm multimode (LC) via SFP [62.5/125 µm fiber: 220 m/722 ft.] [50/125 µm fiber: 550 m/1804 ft.]  
Link Budget: 8.0 dB

### C3210-1024

10/100/1000Base-T (RJ-45) [100 m] to 1000Base-SX 1310nm extended multimode [62.5/125 µm fiber only] (SC) [2 km/1.2 mi.]  
Link Budget: 7.0 dB

### C3210-1014

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

### C3210-1040

10/100/1000Base-T (RJ-45) [100 m] to 1000Base-X SFP Slot (empty)

## Single Fiber Products

### C3210-1029-A1

10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1310nm TX/1550nm RX single fiber single mode (SC) [20 km/12.4 mi.]  
Link Budget: 13.0 dB

### C3210-1029-A2

10/100/1000Base-T (RJ-45) [100 m] to 1000Base-LX 1550nm TX/1310nm RX single fiber single mode (SC) [20 km/12.4 mi.]  
Link Budget: 13.0 dB

Optional Accessories (sold separately)

### SFP Modules