

## ION Fast Ethernet Remotely Managed NID Module

10/100/1000Base-T to 100Base-FX with OAM/IP-Based Management



C2220-1040

The ION C2220 is a managed Network Interface Device (NID) module that provides an interface between 10/100/1000Base-T ports and 100Base-FX ports, allowing users to manage their links while integrating fiber optic cabling into 10/100/1000 copper environments. As a remotely managed device, the C2220 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 C2220 provides various methods for secure delivery of Ethernet services in business and mobile backhaul applications.

### Ordering Information

**C2220-1014**  
10/100/1000Base-T (RJ-45) [100 m]  
to 100Base-FX 1310nm single mode (SC)  
[20 km/12.4 mi.] Link Budget: 16.0 dB

**C2220-1040**  
10/100/1000Base-T (RJ-45) [100 m]  
to 100Base-X SFP Slot (empty)

Optional Accessories (sold separately)

#### SFP Modules

\*Note all units feature USB port for local management application.

### Features

- MEF 9, 14 + 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
- Link Pass Through
- Far-End-Fault (FEF)
- Remote Loopback
- Field Upgradeable Firmware
- IEEE 802.1p QoS Packet Classification
- IEEE 802.1Q VLAN and double VLAN tagging with 4096 VIDs
- DHCP client
- SNMP
- TFTP
- RADIUS client
- RMON counters for each port
- Bandwidth profiling
- DMI Optical Management
- Cable diagnostic function for copper ports

### Specifications

Standards	IEEE 802.3 IEEE 802.3ah IEEE 802.1p IEEE 802.1Q
Data Rate	Copper: 10/100/1000 Mbps Fiber: 100 Mbps
Filtering Address	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	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]
Certifications	EN55022 Class A, EN55024, CE Mark
Warranty	Lifetime

### Features Continued

- SSH
- Telnet
- Command Line Interface (CLI)
- Web management
- Focal Point management
- SNMP v1, v2c, and v3
- USB port for basic setup
- Management VLAN

