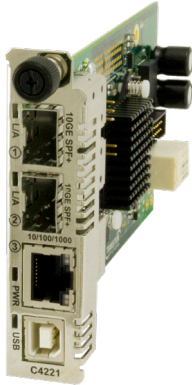


## ION 10 Gigabit Ethernet Remotely Managed Media and Rate Converter NID

10GBase-X to 10GBase-X + 10/100/1000Base-T with Remote Layer 2 Management



The ION C4221 Network Interface Device (NID) is a remotely managed product that offers management via the ION Management Module for secure delivery of Ethernet services for business and mobile backhaul applications. The C4221 is a 10 Gig product with advanced features like remote management of the local and remote cards, VLAN, jumbo frame support, and bandwidth allocation of 10 Gig interfaces. The C4221 offers the additional functionality of a rate converter by also offering a 10/100/1000Base-T RJ-45 port allowing 10/100/1000 based devices to connect to 10 Gigabit Ethernet fiber backbone.

### Ordering Information

**C4221-4848**

- (2) 10GBase-X SFP+ slot (empty)
- + (1) 10/100/1000Base-T RJ-45 ports

Optional Accessories (sold separately)

**SFP Modules**

- SFP+ modules supported:
- 100FX, 1000X, SGMII, and 10 Gig

### Features

- Full non-blocking switching on all interfaces
- (2) 10 Gig SFP+ ports supporting 100FX, 1000X, SGMII, and 10 Gig
- SFP ports individually support same or different speeds simultaneously
- (1) 10/100/1000Base-T port
- Local and remote units can be fully managed by the ION platform
- IPv4 IP TOS, DiffServ and IPv6 traffic class QoS classification via IONMM
- Bandwidth Allocation, per port, from 1 Gig to 10 Gig in 1 Gig increments
- Basic VLAN support
- Jumbo frame support, up to 10,240 bytes
- 16K maximum MAC Addresses
- 8Mbit shared buffer memory
- Remote firmware upgrades
- Auto-MDI/MDIX
- Auto-Negotiation
- SFP+ DMI monitoring (*no vendor specific information*)
- Pause
- Can be used in the ION 19-Slot, 6-Slot, and 1-Slot chassis

### Specifications

|                   |   |
|-------------------|---|
| Standards         | IEEE 802.3<br>IEEE 802.3u<br>IEEE 802.3x<br>IEEE 802.3z<br>IEEE 802.3ab<br>IEEE 802.3ae   |
| Ports             | (1) Copper RJ-45 10/100/1000Base-T port<br>(2) Fiber 10 Gig SFP+ ports supporting 100FX, 1000X, SGMII, and 10 Gig<br>USB port for basic setup |
| Status LEDs       | Power<br>SFP+ Link/Activity for each port<br>TP – Left LED: Duplex, TP Link/Activity<br>TP – Right LED: TP Speed<br>USB – Activity            |
| Switches/Jumpers  | One jumper to load factory defaults   |
| Dimensions        | Width: 0.86" [21.85 mm]<br>Depth: 6.5" [165 mm]<br>Height: 3.4" [86.36 mm]  |
| Power Input       | ION Chassis Backplane   |
| Power Consumption | 6.24 Watts, 520mA!@ 12VDC   |
| Environment       | Operating: 0°C to 50°C<br>Storage: -40°C to 85°C<br>Humidity: 5% to 95% (non-condensing)<br>Altitude: 0 – 10,000 ft.                          |
| Weight            | 1 lb. [0.45 kg]   |
| MTBF              | Greater than 250,000 Hours (MIL-HDBK-217F)<br>Greater than 687,500 Hours (Bellcore)   |
| Certifications    | Safety: CE Mark; Emissions: EN55022 Class A;<br>Immunity: EN55024   |
| Warranty          | 10 Years  |

### Features Continued

- Management provided by IONMM
  - DHCP client
  - Telnet
  - Command Line Interface (CLI)
  - Web management
  - SNMP v1, v2c, and v3
  - Management VLAN