

# **ION Gigabit Ethernet Remotely Managed NID Module**

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



The ION C3230 is a managed multi-service Network Interface Device (NID) module that provides an interface between 10/100/1000Base-T ports and 1000Base-SX/LX ports, allowing users to provide SLA-assurance and advanced fault management while integrating fiber optic cabling into 10/100/1000 copper environments. As a remotely managed device, the C3230 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 802.1ag Service OAM, IEEE 802.3ah Link OAM, ITU Y.1731 Performance Monitoring, VLAN, QoS, SSH/SSL, jumbo frame support, and bandwidth allocation, the C3230 provides various methods for secure delivery of business Ethernet and mobile backhaul deployments.

# **Ordering Information**

#### C3230-10

10/100/1000Base-T (RJ-45) [100 m] to (1) 100/1000Base-X SFP Slot (empty)

#### C3231-1040

10/100/1000Base-T (RJ-45) [100 m] to (2) 100/1000Base-X SFP Slots (empty)

Note: all units feature USB port for local management application.

Note: SGMII support for use with 10/100/1000Base-T copper SFPs.

Optional Accessories (sold separately)

**SFP Modules** 

**USB Cables** 

### **Features**

- MEF 9, 14 and 21 certified
- IEEE 802.3ah Link OAM
- ITU Y.1731
- IEEE 802.1ag Service 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
- IPv4 IP TOS, DiffServ and IPv6 traffic class QoS classification
- IEEE 802.1Q VLAN and double VLAN tagging with 4096 VIDs
- DHCP client
- SNTP
- TFTP

# **Specifications**

Standards  IEEE 802.3 IEEE 802.1p IEEE 802.1q IEEE 802.1q IEEE 802.1ag  Data Rate  Copper: 10/100/1000 Mbps Fiber: 1000 Mbps  Filtering Address  Max Frame Size  10,240 bytes  Dimensions  Width: 3.25" [82 mm] Depth: 6.5" [165 mm] Height: 1" [25 mm]  Power Input  100-240 VAC,1A  Power Output  12 VDC, 1.25A  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  2 lbs. [0.90 kg]  Certifications  ENS5022 Class A, EN55024, UL60950,CE Mark  Warranty  Lifetime		
Fiber: 1000 Mbps  Filtering Address 8K MAC Addresses  Max Frame Size 10,240 bytes  Dimensions Width: 3.25" [82 mm]	Standards	IEEE 802.3ah IEEE 802.1p IEEE 802.1Q
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### **Features Continued**

- RADIUS client
- RMON counters for each port
- Bandwidth profiling
- DMI Optical Management
- Cable diagnostic function for copper ports
- SSH
- Telnet
- Command Line Interface (CLI)
- Web management
- Focal Point Management
- SNMP v1, v2c, and v3
- USB port for basic setup
- Management VLAN

