

slide-in-module for the ion platform

C322x Series

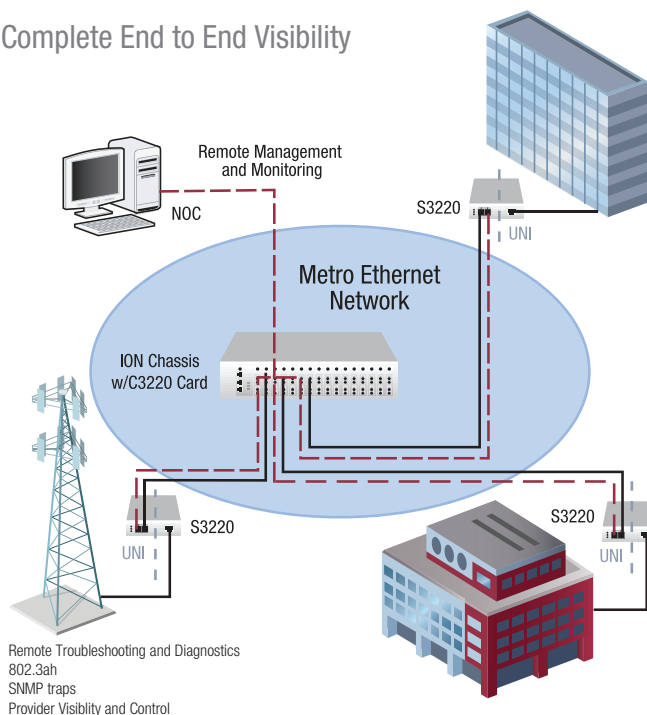
OAM/IP-Based Remotely Managed NID (Network Interface Device)



Features

- ▶ MEF 9, 14 + 21 certified
- ▶ 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)
- ▶ AutoCross™ [
- ▶ Auto-Negotiation
- ▶ Pause
- ▶ Transparent Link Pass Through
- ▶ Far-End-Fault
- ▶ 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
- ▶ SNMP
- ▶ TFTP†
- ▶ 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

Complete End to End Visibility



Applications

- ▶ Ethernet in the First Mile (EFM)
- ▶ E-Line Services (EPL & EVPL)
- ▶ Fiber-to-the-Premise (FTTP)
- ▶ Enterprise Markets

Specifications

Standards	IEEE Std. 802.3, IEEE Std. 802.3ah, IEEE Std 802.1P, IEEE Std 802.1Q, IEEE Std. 802.1X
Data Rate	Copper: 10/100/1000 Mbps Fiber: 1000 Mbps
Filtering Addresses	8K MAC Addresses
Max Frame Size	10,240 bytes
Dimensions	Width: 08.6" [22 mm] Depth: 6.5" [165 mm] Height: 3.4" [86 mm]
Power Consumption	4.5 Watts
Environment	See chassis specifications
Shipping Weight	1 lb. [45 kg]
Regulatory Compliance	EN55022 class A, EN55024, CE Mark
Warranty	Lifetime

*C3220-1040 and C3221-1040 have SGMII support for use with 10/100/1000BASE-T copper SFPs. The ION 3220 Series of Network Interface Devices (NIDs) are a remotely managed product that offers IP or IP-Less management methods for secure delivery of Ethernet services for business and mobile backhaul applications. With MEF 9, 14 + 21 certification the ION 3220 Series ensures you are compliant with the latest standards. The ION 3220 Series is a 10/100/1000Mbps product with advance features including – IEEE 802.3ah Link OAM, VLAN, QoS, SSH/SSL, jumbo frame support and bandwidth allocation.

see also: 10/100/1000BASE-T to 1000BASE-SX/LX Stand-Alone NIDs



Gigabit Ethernet

Ordering Information

- C3220-1013**
C3220-1013-D (DMI Options)
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-SX 850nm MM (SC)
 [62.5/125 µm fiber: 220 m/722 ft.]
 [50/125 µm fiber: 550 m/1804 ft.]
 Link Budget: 8.5 dB
- C3220-1014**
C3220-1014-D (DMI Options)
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-LX 1310nm SM (SC)
 [10 km/6.2 mi.] Link Budget: 10.5 dB
- C3220-1015**
C3220-1015-D (DMI Options)
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-LX 1310nm SM (SC)
 [30 km/18.6 mi.] Link Budget: 15.0 dB
- C3220-1017**
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-LX 1550nm SM (SC)
 [80 km/49.7 mi.] Link Budget: 21.0 dB
- C3220-1035**
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-LX 1550nm SM (SC)
 [120 km/77.7 mi.] Link Budget: 27.0 dB
- ***C3220-1040**
 10/100/1000BASE-T (RJ-45) [100 m]
 to (1) 100/1000Base-X SFP Slot (empty)
- ***C3221-1040**
 10/100/1000BASE-T (RJ-45) [100 m]
 to (2) 100/1000Base-X SFP Slots (empty)

Single Fiber Products

- C3220-1029-A1**
C3220-1029-DA1 (DMI Options)
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-BX-U 1310nm TX/1490nm RX
 Bi-Di SM (SC)
 [20 km/12.4 mi.] Link Budget: 14.0 dB
- C3220-1029-A2**
C3220-1029-DA2 (DMI Options)
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-BX-D 1490nm TX/1310nm RX
 Bi-Di SM (SC)
 [20 km/12.4 mi.] Link Budget: 14.0 dB
- C3220-1029-B1**
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-BX-U 1310nm TX/1490nm RX
 single fiber single mode (SC)
 [40 km/24.8 mi.] Link Budget: 20.0 dB
- C3220-1029-B2**
 10/100/1000BASE-T (RJ-45) [100 m]
 to 1000BASE-BX-D 1490nm TX/1310nm RX
 single fiber single mode (SC)
 [40 km/24.8 mi.] Link Budget: 20.0 dB

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

Optional Accessories (sold separately)

SFP Modules

USB Cables

- USBC-AM-BM-03**
 USB 2.0 Cable A male to B male [3 ft. Gray]
- USBC-AM-BM-06**
 USB 2.0 Cable A male to B male [6 ft. Gray]