LANTRONIX®
Formerly Transition Networks

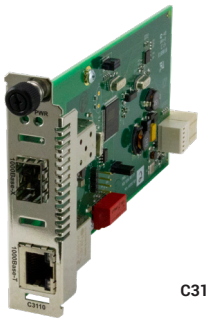
C3110 Series

ION Gigabit Ethernet Media Converter Module

1000Base-T to 1000Base-SX/LX

The ION C3110 is a media converter module that provides an interface between 1000Base-T ports and 1000Base-SX/LX ports, allowing users to integrate fiber optic cabling into 1000Base-T copper environments.

Operating at Layer 1, the physical layer, data is passed through the converter at line speed, making it ideal for applications where low latency is essential. The ION C3110 is a manageable device when installed in a managed ION chassis.



C3110-1040

Features

- Copper and Fiber Auto-Negotiation
- Auto-MDI/MDIX on TP port
- Transparent Link Pass Through
- Remote Fault Detect
- Loopback
- Pause
- Automatic Link Restoration
- Field Upgradeable Firmware
- Can be used in any ION Platform Chassis
- Cost effective fiber deployment by pairing C3110 with lower cost 1000Base-T switches, offering the benefits of fiber without the high costs
- Standards based, will link with any standard 1000Base-T and any standard 1000Base-SX or LX ports

Manageable Features

- Report converter status to chassis management software:
  - Copper and Fiber link/receive status
  - Hardware switch settings
  - Receive error count
- Write operation includes:
  - Write operation enable/disable
  - Power on/off device
  - Auto-Negotiation enable/disable
  - Remote Fiber Fault Detect
  - Transparent Link Pass Through enable/disable
  - Pause enable/disable
  - Symmetric Pause
  - Asymmetric TX Pause
  - Asymmetric RX Pause

Note: Manageable Features are available when used in an ION Platform chassis along with an ION Management Module.

Specifications

Standards	IEEE 802.3ab IEEE 802.3z IEEE 802.3 2000
Data Rate	1000 Mbps, Layer 1
Switches	SW1: Remote Fiber Fault Detect SW2: Pause (symmetric) SW3: Pause (asymmetric) SW4: Transparent Link Pass Through (Up=Enabled) SW5: Fiber Auto-Negotiation (Down=Enabled) SW6: Loopback
Jumpers	Hardware: Mode of operation is determined by the settings on the 4-position switch Software: Mode of operation is determined by the most recently saved on-board microprocessor settings
Status LEDs	LKF (fiber link): On = Fiber Link, blinking activity PWR (Power): On = Connection to powered backplane TP LED 1 (Copper Link): On = Link, blinking activity TP LED2 (Copper Duplex): On = Full-Duplex
Dimensions	Width: 0.86" [22 mm] Depth: 6.5" [165 mm] Height: 3.4" [86 mm]
Power Consumption	3.6 Watts, 300mA @ 112 VDC
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]
MTBF	Greater than 250,000 hours (MIL-HDBK-217F) Greater than 667,500 hours (Bellcore)
Certifications	CISPR/EN55022 Class A, FCC Class A, CE Mark, EN55024
Warranty	Lifetime

Ordering Information

C3110-1013
1000Base-T (RJ-45) [100 m/328 ft.] 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

C3110-1039
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.] Link Budget: 8.0 dB [50/125 µm fiber: 550 m/1804 ft.] Link Budget: 8.0 dB

C3110-1014
1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-LX 1310nm single mode (SC) [10 km/6.2 mi.] Link Budget: 10.5 dB

C3110-1040
1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-X SFP Slot (empty)

Optional Accessories (sold separately)

SFP Modules

MEDIA CONVERTERS