

# S4120-1048

## 10GBase-T Copper to Fiber Media Converter



### Features

- Transparent Link Pass Through
- Auto-Negotiation
- AutoCross
- Automatic Link Restoration
- Loopback on Fiber and Copper
- DMI
- Support Remote In-band Management and Remote Firmware Upgrade when linked to a C4120 card installed in a managed ION chassis
- Fiber Port supported standards
  - 10GBase-SR
  - 10GBase-LRM
  - 10GBase-LR
  - 10GBase-ER
  - 10GBase-ZR
- The open SFP+ port also supports:
  - direct attached 10G copper cable assemblies:
  - both Class-I and Class-II fiber
  - SFP+ modules
  - SFP modules supporting WDM technology
- Support 100m on Cat6a or higher UTP Per Energy Efficient Ethernet standards, IEEE 802.3az, UTP cable length is detected and power is adjusted according, to reduce power consumption on shorter UTP cable installs

The x4120-1048 is a 10 Gigabit Ethernet copper to fiber media converter. It offers conversion technology by providing one 10GBase-T RJ-45 port and one pluggable 10GBase-X fiber SFP+ port. The open SFP+ port supports a wide variety of Transition Networks 10GE SFP+ fiber modules, as well as third party MSA compatible SFP+ modules.

The x4120 provides several 10G Ethernet enterprise and data center connectivity solutions. Since most 10G Ethernet switches support a combination of copper RJ-45 and open SFP+ ports, the x4120 allows users to convert either of these ports to the media type of their preference to match their network requirements, including direct attached copper SFP+ cables.

The stand-alone S4120 is an unmanaged device, until it is linked to C4120 installed in a managed ION chassis, then remote in-band management of the S4120 is available.

### Specifications

Standards	IEEE802.3, IEEE 802.3an, IEEE 802.3ae, IEEE 802.3az
Data Rate	10 Gbps
Status LEDs	PWR (Power): On = power is on L/A SFP+ (Fiber port link and activity status): On = Link OK Flashing = Link and Activity OK Copper Link (Copper Link Status): On = Link OK Copper Act (Copper Link Activity): On = Activity OK
Dip Swithes	SW1: Copper Loopback SW2: Fiber Loopback SW3: not used SW4: Transparent Link Pass Through
Dimensions	<b>Width:</b> 3.25" [82.55 mm] <b>Depth:</b> 6.5" [165 mm] <b>Height:</b> 1.0" [25.4 mm]
Power	External AC/DC power supply, Universal AC input, 12VDC 1.6A output
Power Consumption	10.5 watts
Environment	Operating Temp: 0 – 50°C Storage Temp: -15 to +65°C Operating Humidity: 5% to 95% (non condensing) Altitude: 0 – 10,000 feet
Shipping Weight	2 lbs
MTBF w/Power Supply	Greater than 41,660 hours (MIL-HDBK-217F) Greater than 114,580 hours (Bellcore)
MTBF w/o Power Supply	Greater than 250,000 hours (MIL-HDBK-217F) Greater than 687,000 hours (Bellcore)
Regulatory Compliance	FCC Class A, EN55022 Class A, EN55024, CE Mark
Warranty	Lifetime



### Ordering Information

**S4120-1048**  
10GBase-T RJ-45 100m to 10GBase-X SFP+ Slot (Empty)

Optional Accessories (sold separately)

#### 10Gig SFP+ Modules

**TN-10GSFP-xx**  
10GBase SFP+, MSA Compatible,  
for Dual Strand and Single Strand fiber

**TN-J9150A**  
10GBase SFP+, HP Compatible,  
10GBase-SR

**TN-SFP-10G-xx**  
10GBase SFP+, Cisco Compatible, for Dual  
Strand and Single Strand fiber

**TN-CWDM-10G-1xx0-40**  
10GBase CWDM SFP+,  
Cisco Compatible, 40km

**TN-CWDM-10G-1xx0-80**  
10GBase CWDM SFP+,  
Cisco Compatible, 80km

**DAC-10G-SFP-0xM**  
10G SFP+ Direct Attached Copper Cable  
Assemblies

#### Mounting Brackets

**WMBL**  
Wall Mount Bracket 4.0" [102 mm]

**WMBD**  
5.0" [127 mm] DIN Rail Mount Bracket

**E-MCR-05**  
12-Slot Media Converter Rack

**RMS19-SA4-01**  
4-Slot Media Converter Shelf