

## Direct Attach Cables / Active Optical Cables

A simple to install, cost-effective and interoperable solution

Often used for data center short-reach interconnects, Direct Attach, Active Copper and Active Optical Cables are an indispensable part of any network.

Terminated with transceiver-style connectors, they are designed to be used in the same ports as a typical SFP+ or QSFP transceiver, with no need for adapters or converters. Our DAC and AOC cables offer compatibility with a huge range of vendors, enabling the connectivity you need within the Top of Rack and End of Row environments.

- 10G, 25G, 40G \& 100G product solutions
- Seamless interoperability with network equipment
- Multi-code options enabling different OEM vendors at each end of the cable
- $4 x$ breakout cables, 40 G QSFP+ to 4 x 10G SFP and 100G QSFP28 to 4 x 25G SFP28
- Fast Delivery, Custom solutions
- Compatible with Over 90 Systems
- Savings of up to $70 \%$

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net. work. solution. made in Germany
*1 SFP port (Empty)to (4) RJ-48 [1.5 km/0.9 mi.] plus 10/100Base-TX (RJ-45) [100m]

The ION C6120 is a managed T1/E1/J1 mux media converter module that provides a solution for those users that need to extend multiple T1/E1/J1 connections, along with a 10/100 Ethernet connection, all over fiber. The C6120 includes (4) RJ-48 ports, (1) $10 / 100$ Ethernet port, and (1) fiber port. The device is available in versions that support fixed fiber connectors as well as SFP fiber modules offering support for a variety of fiber types, distances, and wavelengths to provide maximum flexibility across a variety of network topologies. CWDM SFPs can also be utilized to further increase the bandwidth capacity of the fiber infrastructure.

The C6120 converter must be used in pairs. A typical installation will include a modular card installed in a managed ION chassis linked over fiber to a stand-alone S6120 in a remote location.

## Features

- (4) RJ-48 copper interfaces
- (1) fiber interface (fixed or SFP)
- (1) RJ-45 10/100Mbps Ethernet port
- Auto-MDI/MDIX
- Pause (Flow Control on Ethernet port)
- Loopback via test set
- Local and remote loopbacks
- LEDs for device status and troubleshooting
- Settings for line code, line build out, loopbacks and Alarm Indication Signal (AIS)
- Access to complete status and configuration on local and remote device
- Remote firmware upgrade
- Remote management
- Must be used in pairs


## Technical Data

## Standards

- ANSI T1. 102
- T1.403
- T1.408
- ITU I.431
- G. 703
- G. 736
- G. 775
- G. 823
- ETSI 300-166
- ETSI 300-233
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- TBR $12 / 13$
- AT\&T Pub 62411
- IEEE 802.3™-2008


## Data Rate

- Copper ports (RJ-48): $\mathrm{T} 1(\mathrm{~J} 1)=1.544 \mathrm{Mb} / \mathrm{s}$,
- $\mathrm{E} 1=2.048 \mathrm{Mb} / \mathrm{s}$
- Ethernet port (RJ-45): 10/100Mbps
- SFP port(s) (empty): 100Base-X/OC-3


## Switch

- Numerous switch settings for line coding, line build out, loopback and AIS


## Status LEDs

- Power, Port Status, Loopback and AIS


## Dimensions

- Width: $1.72^{\prime \prime}$ [44 mm]
- Depth: 6.5" $[165 \mathrm{~mm}]$
- Height: $3.4^{\prime \prime}$ [86 mm]


## Power Consumption

- 6 Watts (max: dual fiber model)
- 5.5 Watts (max: single fiber model)


## Environment

- Environment specs are dependent on the chassis chosen
- Operating: $0^{\circ} \mathrm{C}$ to $50^{\circ} \mathrm{C}$
- Humidity: $5 \%$ to $95 \%$ (non-condensing)
- Altitude: $0-10,000 \mathrm{ft}$.


## Weight



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- $1 \mathrm{lb} .[0.45 \mathrm{~kg}]$


## MTBF

- 687,500 hours (Bellcore)


## Certifications

- EN55022 Class A, EN55024, CE mark


## Warranty

- Lifetime


## Product variants \& accessories

Art.-No.
C6120-1040

