



1 Gbps to 11.5 Gbps fiber repeater with two open SFP+ slots, any-rate to same-rate ION slide-in card media converter





# **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
- 4x breakout cables, 40G QSFP+ to 4x 10G SFP and 100G QSFP28 to 4x 25G SFP28
- Fast Delivery, Custom solutions
- Compatible with Over 90 Systems
- Savings of up to 70%



tde® trans data elektronik GmbH

### **Headquarter address:**

Lingener Str. 2 D-49626 Bippen/Ohrte

Tel.: +49 5435 9511 0 Fax.: +49 5435 9511 32

#### Sales office address:

Prinz-Friedrich-Karl-Str. 46 D-44135 Dortmund

Tel.: +49 231 8805 61 13 Fax.: +49 231 8805 61 15

info@tde.de | www.tde.de

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The C4110 is a fiber to fiber media converter module. It is protocol independent and supports data rates from 1Gbps to 11.5Gbps through two open SFP+ ports. This allows network managers to customize the C4110 with a pair of SFP+ modules to meet their network requirements. The open SFP+ port supports a wide variety of Lantronix 10Gbps SFP+ fiber modules. This anyrate to same-rate converter can be used to perform reliable and cost-effective single mode to multimode conversion or it can be used to provide wavelength conversion in CWDM applications. The ION C4110 is a manageable device when installed in a managed ION chassis.

#### **Features**

- Fiber to fiber repeater
- Remotely Managed when installed in a Managed ION Chassis
- Supports data rates from 1Gbps to 11.5Gbps
- Support Any-rate to Same-rate
- Protocol Transparent supports:
- Ethernet: 10Gig LAN, 10Gig Wan, 1Gig LAN
- Fiber Channel: 10, 8, 4, 2, 1Gig
- SONET/SDN OC-192, OC-48
- SFP to SFP or SFP+ to SFP+
- Provides conversion between different types of fiber
- Supported transmission distance based on the SFP modules and type of

#### fiber used

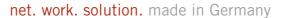
- Supports 3R (Reamplify, Reshape, and Retime) signal regeneration
- No frame size limitations
- Use as a fiber mode converter
- Use as a specific wavelength CWDM Transponder
- Also available as a stand-alone converter: S4110-4848

### **Technical Data**

#### **Standards**

- IEEE 802.3ae
- ITU.G.709
- SFF8431
- Multi-sourcing Agreement (MSA)
- Small Form Factor Pluggable (SFP)

#### **Ports**





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- PWR On = Power
- Port 1 Link/Act: On = Link, Flashing = Network Traffic
- Port 2 Link/Act: On = Link, Flashing = Network Traffic

#### **Data Rate**

• Protocol Independent, 1 Gbps to 11.5 Gbps

### **Dip Switch**

• Only 4 of the 8 Dip Switches are used to select the operational data rate, see the user guide for the supported dip switch configurations

## **Dimensions**

• Width: 0.86" [22 mm] • Depth: 6.5" [165 mm] • Height: 3.4" [86 mm]

### **Power Consumption**

• 4.2 Watts

### **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]

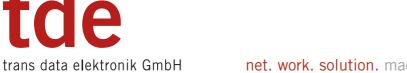
#### **MTBF**

- Greater than 250,000 hours (MIL-HDBK-217F)
- Greater than 687,000 hours (Bellcore)

#### **Certifications**







net. work. solution. made in Germany

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• FCC Class A, CE Mark, EN55022 Class A, EN55024

### Warranty

Lifetime

# **Product variants & accessories**

ArtNo.	Description
C4110-4848	1 Gbps to 11.5 Gbps fiber repeater with two open SFP+ slots, any-rate to same-rate ION slide-in card media converter