3Gbit Fiber Optic / SDI Transceiver

- SDI Fiber receiver and transmitter in single package
- Supports SDI video up to 3Gbit/s (1080p60)
- 3Gbit Level A and Level B support (all formats)
- Auto re-clocking 270Mbit / 1.5Gbit / 3Gbit
- Error free optical connections
- Singlemode and Multimode versions
- Up to 10km (6.2 miles) @ 3Gbit/s (singlemode)
- Up to 300m (984 feet) @ 3Gbit/s (multimode)
- Duplex LC optical connection
- Supports hot swapping and hot plugging

Using the same basic module we provide two versions suitable for singlemode or multimode fiber. Each version has a different SFP installed.

The OTR 1810 is a Fiber / SDI transmitter and receiver combined in a single self contained package. It is a convenient and cost-effective solution to combat the restrictions involved with the distribution of uncompressed broadcast quality video signals over long distances.

Each OTR 1810 transceiver has an independent transmitter and receiver channel, which provides an effective solution for any SDI signal up to 1080p60 (3Gbit/s) while preserving full uncompressed quality.

The OTR 1810 will auto-detect and re-clock any 270Mbit / 1.5Gbit and 3Gbit SDI source prior to conversion. The module is fully compatible with 3Gbit Level A and Level B formats.

Fiber Adapter Options (singlemode only not multimode)
These adapter kits allow the use of ST or SC fiber connections on the module. SMF 0.5m (19.6") tail introduces less than 0.25dB attenuation.

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<td>LC/ST DUP</td>
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Technical Specifications

SDI Video
- 1 x SDI video input
- 1 x SDI Video output
- 75 Ohm BNC connectors
- SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI
- Multi-standard operation from 270Mbit/s to 3Gbit/s
- Multi-rate re-clocking
- 270Mbit/s - 1.5Gbit/s - 3Gbit/s
- Electrical Return Loss: >15dB from 5MHz to 1.5GHz, >10dB from 1.5GHz to 3GHz
- Automatic cable EQ (Belden 1694A cable)
- 340m @ 270Mbit/s, 150m @ 1.5Gbit/s, 120m @ 3Gbit/s

Fiber Optic
- 1 x fiber optic input
- 1 x fiber optic output
- Duplex using LC Connections
- SMPTE 297M - 2006
- Singlemode Version: OTR 1810
  - Transmitter: 1310nm (-5dBm)
  - Receiver: 1260nm to 1620nm (-3dBm to -19dBm)
  - Max. distance 10km (6.2 miles) @ 3Gbit/s
- Multimode Version: OTR 1810 MM
  - Transmitter: 850nm (-5dBm)
  - Receiver: 750nm to 880nm (-15dBm)
  - Max. distance 300m (984 feet) @ 3Gbit/s
- TX active LED, and RX active on side of module

Power
- +12VDC @ 2.6W nominal (supports 7 - 16VDC input range)

Physical
- Size: 140mm x 42mm x 22mm (5.51" x 1.65" x 0.86") including connectors
- Weight: 125g (4.4oz)

Ambient
- 5 - 40ºC (41 - 104ºF)
- 90% Humidity (non condensing)

Model #
- OTR 1810-1 LC (Singlemode) - (EAN# 4250479318144)
- OTR 1810-1 MM (Multimode) - (EAN# 4250479359840)

Includes
- Module, AC power supply

Power Adapter Options
The kit INCLUDES AC power supplies. The power adapters below are optional.

P-TAP 1000
Use with a standard battery P-TAP power source.

XLR 1000
Use with a standard 4 pin XLR camera battery power source.

Specifications subject to change