Velopis otr 1810-1 LC OTR 1810-1 LC OTR 1810-1 MM

3G Fiber Optic/SDI Transceiver

- SDI Fiber receiver and transmitter in single package
- Supports SDI video up to 3Gbit/s (1080p60)
- 3G Level A and Level B support (all formats)
- Auto reclocking 270Mbit/s, 1.5Gbit/s, 3Gbit/s
- 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

The OTR 1810-1 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 1810-1 transceiver has an independent transmitter and receiver channel, which provides an effective solution for any SDI signal up to 3G (1080p60) while preserving full uncompressed quality.

The OTR 1810-1 will auto-detect and re-clock any 270Mbit/s, 1.5Gbit/s, or 3Gbit/s SDI source prior to conversion. The module is fully compatible with 3G Level A and Level B formats.



Singlemode SFP Multimode SFP

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

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.

Fiber Adapter Options

These adapter kits allow the use of ST, SC or FC fiber connections on the module.



Model# LC/SC DUP LC/PC to SC/PC Adapter



Model# LC/ST DUP LC/PC to ST/SC Adapter



Model# LC/FC DUP LC/PC to FC/SC Adapter



Technical Specifications

SDI Video 1 x SDI input on 75 Ohm BNC connectors

1 x SDI output on 75 Ohm BNC connectors

SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI

Multi-standard operation from 270Mbit/s to 3Gbit/s

Multi-rate reclocking 270Mbit/s - 1.5Gbit/s - 3Gbit/s

Electrical Return Loss: to 1.5GHz >15dB to 3GHz: >10dB Automatic 270Mbit/s 1.5Gbit/s 3Gbit/s cable EQ: 220m 250m 150m

Belden 1694A cable

10km(6.2miles) @3Gbit/s

Fiber Optic

Power

1 x fiber optic input, 1 x fiber optic output Duplex (Singlemode) using LC/PC Connections

SMPTE 297M - 2006

Max. distance*

Singlemode Version: OTR 1810-1 LC

Transmitter Receiver	Wavelength:	1310nm
	Optical Power:	-5 dBm (typ.)
	Wavelength:	1260nm to 1620nm
	Sensitivity:	-16 dBm (min.)

Multimode Version: OTR 1810-1 MM

Moniniode Version: OTK 1010-1 Milli			
Transmitter	Wavelength:	850nm	
	Optical Power:	-7dBm to -2dBm	
Receiver	Wavelength:	750nm to 880nm	
	Sensitivity:	-15 dBm (min)	
Max. distance*	300m	(984 feet) @3Gbit/s	

TX & RX active LEDs on side of module

+12V DC @ 2W nominal with SFP - (supports 7 - 24V DC input range)

Power LED on side of module

Physical 140mm x 42mm x 22mm (incl. connectors) $(5.51" \times 1.65" \times 0.86")$ 125g (4.4oz) Weight:

5 - 40°C (41 - 104°F) 90% Humidity (non condensing) **Ambient**

EAN# 4250479318144 Model # OTR 1810-1 LC OTR 1810-1 MM EAN# 4250479359840

Includes Module, SFP Module, AC power supply

*Distance is an approximation. Actual distances achieved can be longer or shorter depending on the type of cable. Determine link losses and perform optical budget calculations to ensure correct operation



Broadcast Television Equipment

