

3Gbit Fiber Optic / SDI Transceiver (CWDM)

- Optical receiver and transmitter in single package
- Supports SDI video up to 3Gbit/s (1080p60)
- 3Gbit Level A and Level B support (all formats)
- Auto relocking 270Mbit / 1.5Gbit / 3Gbit
- CWDM with 18 wavelength selections
- Error free optical connections
- Up to 40km (24.8 miles) @ 3Gbit/s
- Duplex LC/PC single mode optical connections
- Supports hot swapping and hot plugging



The OTR 1840-1 is a CWDM Fiber Optic to SDI transmitter and receiver combined in a compact 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 1840-1 CWDM 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. Select from 18 transmitter wavelengths for full CWDM compatibility (ITU-T G.694.2)

The OTR 1840-1 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.

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.

Ordering Info:

Note: The **OTR 1840-1** price **DOES NOT INCLUDE** the fiber transmitter SFP sub module. Please specify the required wavelength from the option list below.

CWDM Wavelength Options. ITU-T G.694.2 (select one)

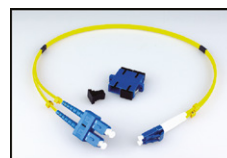
Wave-length	TX Power	RX Sensitivity	Option #	Wave-length	TX Power	RX Sensitivity	Option #
1270nm	-1dBm	-20dBm	OH-TR-4-1270-LC	1450nm	-1dBm	-20dBm	OH-TR-4-1450-LC
1290nm	-1dBm	-20dBm	OH-TR-4-1290-LC	1470nm	-1dBm	-20dBm	OH-TR-4-1470-LC
1310nm	-1dBm	-20dBm	OH-TR-4-1310-LC	1490nm	-1dBm	-20dBm	OH-TR-4-1490-LC
1330nm	-1dBm	-20dBm	OH-TR-4-1330-LC	1510nm	-1dBm	-20dBm	OH-TR-4-1510-LC
1350nm	-1dBm	-20dBm	OH-TR-4-1350-LC	1530nm	-1dBm	-20dBm	OH-TR-4-1530-LC
1370nm	-1dBm	-20dBm	OH-TR-4-1370-LC	1550nm	-1dBm	-20dBm	OH-TR-4-1550-LC
1390nm	-1dBm	-20dBm	OH-TR-4-1390-LC	1570nm	-1dBm	-20dBm	OH-TR-4-1570-LC
1410nm	-1dBm	-20dBm	OH-TR-4-1410-LC	1590nm	-1dBm	-20dBm	OH-TR-4-1590-LC
1430nm	-1dBm	-20dBm	OH-TR-4-1430-LC	1610nm	-1dBm	-20dBm	OH-TR-4-1610-LC

Technical Specifications

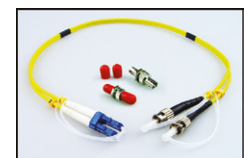
SDI Video	1 x SDI video input 1 x SDI Video output 75 Ohm BNC connectors
	SMPTTE 424M, SMPTTE 292M, SMPTTE 259M, DVB-ASI
	Multi-standard operation from 270Mbit/s to 3Gbit/s
	Multi-rate relocking 270Mbit/s - 1.5Gbit/s - 3Gbit/s
	Electrical Return Loss: >15dB from 5MHz to 1.5GHz, >10dB from 1.5GHz to 3GHz
	Automatic cable EQ (Belden 1694A cable) 340m @ 270Mbit/s, 150m @ 1.5Gbit/s, 120m @ 3Gbit/s
Fiber Optic	1 x fiber optic input (Range 1260-1620nm, Sensitivity -3dBm to -19dBm) 1 x fiber optic output (CWDM - 18 selectable wavelengths - ITU-T G.694.2) Duplex (Singlemode) using LC/PC Connections
	SMPTTE 297M - 2006
	Hot pluggable
	TX active LED, and RX active on side of module
	Single mode transmit / receive (duplex connector)
	Max. distance approx. 40km (24.8 miles) @ 3Gbit/s (Singlemode)
Power	+12VDC @ 1.9W nominal without SFP +12VDC @ 2.7W nominal with SFP (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 - 40°C (41 - 104°F) 90% Humidity (non condensing)
Model #	OTR 1840-1 - (EAN# 4250479318403)
Includes	Module, AC power supply

Fiber Adapter Options

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.



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



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

OTR1840-1-rev13 Specifications subject to change