

12G Fiber Optic/SDI Transceiver (CWDM)

- Optical receiver and transmitter in single package
- Supports SDI video up to 12Gbit/s (4096x2160 @ 60 Hz)
- 3G Level A and Level B support (all formats)
- Auto reclocking 1.5Gbit/s, 3Gbit/s, 6Gbit/s, 12Gbit/s
- CWDM with 18 wavelengths (1270nm to 1610nm) selections
- Error free optical connections
- Up to 10km* (6.2 miles) @ 12Gbit/s (singlemode)
- Duplex LC/PC single mode optical connections
- Supports hot swapping and hot plugging

The OTR 1440 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 1440 CWDM transceiver has an independent transmitter and receiver channel, which provides an effective solution for any SDI signal up to 12G (4096x2160 @ 60Hz), while preserving full uncompressed quality. Select from 18 transmitter wavelengths for full CWDM compatibility (ITU-T G.694.2)

The OTR 1440 will auto-detect and re-clock any 270Mbit/s, 1.5Gbit/s, 3Gbit/s, 6Gbit/s, or 12Gbit/s SDI source prior to conversion. The module is fully compatible with 3G Level A and Level B formats.

Note: This yellobrik **DOES NOT INCLUDE** the fiber SFP module. Please specify the required SFP option from the option list.

CWDM Wavelength Options (select one)

Wavelength	TX Power	RX Sensitivity	Option #	EAN
1270nm	-2dBm to +3dBm	6G, 12G: -10dBm (typ)	OH-TR-12G-1270-LC	4250479326552
1290nm			OH-TR-12G-1290-LC	4250479326569
1310nm			OH-TR-12G-1310-LC	4250479326576
1330nm			OH-TR-12G-1330-LC	4250479326583
1350nm			OH-TR-12G-1350-LC	4250479326682
1370nm			OH-TR-12G-1370-LC	4250479326699
1390nm		1.5G, 3G: -14dBm (typ)	OH-TR-12G-1390-LC	4250479326705
1410nm			OH-TR-12G-1410-LC	4250479326712
1430nm			OH-TR-12G-1430-LC	4250479326729
1450nm			OH-TR-12G-1450-LC	4250479326736
1470nm			OH-TR-12G-1470-LC	4250479326743
1490nm			OH-TR-12G-1490-LC	4250479326750
1510nm		1.5G, 3G: -14dBm (typ)	OH-TR-12G-1510-LC	4250479326767
1530nm			OH-TR-12G-1530-LC	4250479326774
1550nm			OH-TR-12G-1550-LC	4250479326781
1570nm			OH-TR-12G-1570-LC	4250479326798
1590nm			OH-TR-12G-1590-LC	4250479326804
1610nm			OH-TR-12G-1610-LC	4250479326811

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.



Technical Specifications

SDI Video

1 x SDI input on 75 Ohm BNC connectors
1 x SDI output on 75 Ohm BNC connectors

SMPTE 2082-1, SMPTE 2081-1, SMPTE 424M, SMPTE 292M, SMPTE 259M

Multi-standard operation from 270Mbit/s to 12Gbit/s

Multirate reclocking: 270Mbit/s - 1.5Gbit/s - 3Gbit/s - 6Gbit/s - 12Gbit/s

Electrical Return Loss	to 1.5GHz	to 3GHz	to 6GHz	to 12GHz
	>15dB	>10dB	>7dB	>4dB
Automatic cable EQ	270Mbit/s 250m	1.5Gbit/s 220m	3Gbit/s 150m	6Gbit/s 90m
			Belden 1694A	Belden 4794R

Fiber Optic

1 x fiber optic input, 1 x fiber optic output
Duplex (singlemode) using LC/PC connection

SMPTE 297M - 2006

Transmitter	Wavelength	See CWDM Wavelength Options
-------------	------------	-----------------------------

Optical power	See CWDM Wavelength Options
---------------	-----------------------------

Receiver	Wavelength	1260nm to 1620nm
----------	------------	------------------

Sensitivity	See CWDM Wavelength Options
-------------	-----------------------------

Max. distance*	10km (6.2 miles) @ 12Gbit/s
----------------	-----------------------------

TX & RX active LEDs on side of module

Power

+12V DC @ 1.9W nominal - (supports 7 - 24VDC input range)

Power LED on side of module

Physical

Size (incl. connectors)	140mm x 42mm x 22mm (5.51" x 1.65" x 0.86")
-------------------------	--

Weight:	125g (4.4oz)
---------	--------------

Ambient

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

Model

OTR 1440 4250479326620

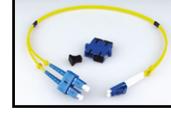
Includes

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.

Fiber Adapter Options

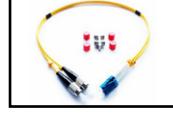
These adapter kits allow the use of ST, SC or FC fiber connections on the module.



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

