

# yellobrik® OTR 1840

## 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 / 2.97Gbit
- 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

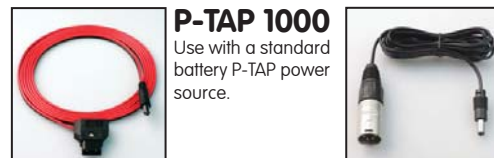
The OTR 1840 is a CWDM Fiber Optic to SDI transmitter and receiver combined in a compact self contained package. It is a convenient and cost effective solution to combat the restrictions involved with the distribution of uncompressed broadcast quality video signals over long distances.

Each OTR 1840 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 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 supply. 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 price **DOES NOT INCLUDE** the fiber transmitter SFP sub module. Please specify the required wavelength from the option list below when ordering.

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

Wavelength	Power	Option #	Wavelength	Power	Option #
1270nm	-1dBm	<b>OH-TR-4-1270</b>	1450nm	-1dBm	<b>OH-TR-4-1450</b>
1290nm	-1dBm	<b>OH-TR-4-1290</b>	1470nm	-1dBm	<b>OH-TR-4-1470</b>
1310nm	-1dBm	<b>OH-TR-4-1310</b>	1490nm	-1dBm	<b>OH-TR-4-1490</b>
1330nm	-1dBm	<b>OH-TR-4-1330</b>	1510nm	-1dBm	<b>OH-TR-4-1510</b>
1350nm	-1dBm	<b>OH-TR-4-1350</b>	1530nm	-1dBm	<b>OH-TR-4-1530</b>
1370nm	-1dBm	<b>OH-TR-4-1370</b>	1550nm	-1dBm	<b>OH-TR-4-1550</b>
1390nm	-1dBm	<b>OH-TR-4-1390</b>	1570nm	-1dBm	<b>OH-TR-4-1570</b>
1410nm	-1dBm	<b>OH-TR-4-1410</b>	1590nm	-1dBm	<b>OH-TR-4-1590</b>
1430nm	-1dBm	<b>OH-TR-4-1430</b>	1610nm	-1dBm	<b>OH-TR-4-1610</b>

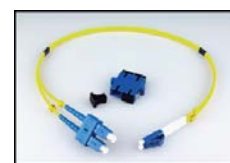


### Technical Specifications

<b>SDI Video</b>	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 relocking 270Mbit/s - 1.48Gbit/s - 3Gbit/s
	Return Loss: > 15dB to 1.5GHz and > 10dB up to 3GHz
	Automatic cable EQ (Belden 1694A cable) 250m @ 270Mbit/s, 140m @ 1.5Gbit/s, 80m @ 3Gbit/s
<b>Fiber Optic</b>	<b>1 x fiber optic input</b> (Range 1260-1620nm, Sensitivity -3dBm to -19dBm) <b>1 x fiber optic output</b> (CWDM - 18 selectable wavelengths - ITU-T G.694.2) Duplex (Singlemode) using LC/PC Connections
	SMPTE 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)
<b>Power</b>	+12VDC @ 1.9W nominal without SFP +12VDC @ 2.7W nominal with SFP (supports 7 - 16VDC input range)
<b>Physical</b>	Size: 140mm x 42mm x 22mm (5.51" x 1.65" x 0.86") including connectors Weight: 125g (4.4oz)
<b>Ambient</b>	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)
<b>Model #</b>	OTR 1840 - (EAN# 4250479318403)
<b>Includes</b>	Module, AC power supply, transport case

### 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/PC Adapter

Specifications subject to change

# yellobrik® OET 1540

## Ethernet to Fiber Transceiver (switch) - CWDM

- Supports standard Ethernet inputs up to 1 Gbit
- 3 port Ethernet switch (1 fiber, 2 electrical)
- Auto (10/100/1000) port speed detection
- Manually force 10Mbit electrical speed (if needed)
- Fiber transceiver speed always 1 Gbit
- Auto or manual electrical crossover selection
- Distances up to 40km (24.8 miles) over fiber
- 18 CWDM wavelength selections (ITU-T G.694.2)

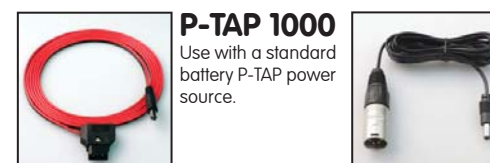
The OET 1540 is a compact CWDM compatible Ethernet 3 port switch, designed to extend the reach of electrical Ethernet signals over long distances using a constant (fixed) high speed 1 Gbit optical transceiver speed.

18 selectable CWDM wavelengths are provided to enable the module to be used in a multiplexed CWDM environment. When paired with another OET 1540 at the receiving end (using two fiber links) you have a cost effective Ethernet extender system for distances up to 40km - providing a stable, high speed 1Gbit error free optical connection between locations.

The OET 1540 has two standard RJ45 electrical Ethernet ports plus fiber I/O and functions as a 3 port Ethernet switch. For legacy system use; each electrical Ethernet port can be set for automatic speed detection (10/100/1000) or forced to 10Mbit, and each port can use auto crossover detection or be forced manually if needed. These functions are available using the dip switch.

### Power Adapter Options

The kit **INCLUDES** AC power supply. The power adapters below are optional.



#### P-TAP 1000

Use with a standard battery P-TAP power source.

#### XLR 1000

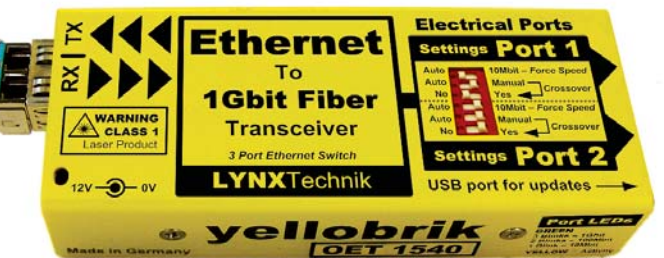
Use with a standard 4 pin XLR camera battery power source.

### Ordering Info:

Note. The OET 1540 price **DOES NOT INCLUDE** the fiber transceiver SFP sub module. Please specify the required wavelength from the option list below when ordering.

### CWDM TX Wavelength Options (select one)

Wavelength	Power	Option #	Wavelength	Power	Option #
1270nm	+2dBm	<b>OH-TR-54-1270</b>	1450nm	+2dBm	<b>OH-TR-54-1450</b>
1290nm	+2dBm	<b>OH-TR-54-1290</b>	1470nm	+2dBm	<b>OH-TR-54-1470</b>
1310nm	+2dBm	<b>OH-TR-54-1310</b>	1490nm	+2dBm	<b>OH-TR-54-1490</b>
1330nm	+2dBm	<b>OH-TR-54-1330</b>	1510nm	+2dBm	<b>OH-TR-54-1510</b>
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1410nm	+2dBm	<b>OH-TR-54-1410</b>	1590nm	+2dBm	<b>OH-TR-54-1590</b>
1430nm	+2dBm	<b>OH-TR-54-1430</b>	1610nm	+2dBm	<b>OH-TR-54-1610</b>

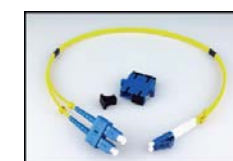


### Technical Specifications

<b>Ethernet</b>	2 x Ethernet ports, RJ 45 Connectors. 10 BaseTUTP category 3,4 or 5 cable up to 328ft/100m (2 pairs) 100 BaseTXUTP category 5 cable up to 328ft/100m (2 pairs) 1000 BaseTXUTP category 5 cable up to 328ft/100m (4 pairs)
	Auto detect bit rate (10/100/1000), or force to 10Mbit for each port (selectable)
	Automatic crossover detection or force manually for each port (selectable)
	Port speed / activity LED indication (next to Ethernet port)
<b>Fiber Optic</b>	<b>1 x fiber optic input</b> (Range 1270-1610nm, Sensitivity -3dBm to -23dBm) <b>1 x fiber optic output</b> CWDM (ITU-T G.694.2) 18 selectable wavelengths Duplex (Single mode) using LC/PC Connections
	IEEE 802.3z (1000BASE-X Gbit/s Ethernet over Fiber at 1 Gbit/s (125 MB/s))
	Fiber TX active and RX active LEDs on side of module
	Max. distance approx. 40km (24.8 miles - Singlemode)
<b>Power</b>	+12VDC @ 1.5W nominal without SFP +12VDC @ 2.3W nominal with SFP (supports 7 - 15VDC input range)
<b>Physical</b>	Size: 120mm x 42mm x 22mm (4.73" x 1.65" x 0.86") including connectors Weight: 125g (4.4oz)
<b>Ambient</b>	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)
<b>Model #</b>	OET 1540 - (EAN# 4250479315426)
<b>Includes</b>	Module, AC power supply, transport case

### 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**  
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Model# **LC/ST DUP**  
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