



4K Fiber Transmission System

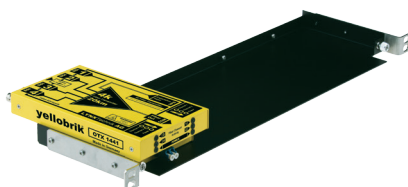
- Support for 4 independent 3G/HD/SD-SDI channels
- Transport 4K (uncompressed) up to 20km (12 miles)
- Each channel supports resolutions up to 1080p/60Hz
- Each channel individually relocked
- Embedded audio / metadata support for each channel
- Integrated expansion port to add more channels
- LED indicators for channel activity and power
- Kit includes transmitter, receiver and power supplies
- Optional 19" Rack tray to mount (max) 4 modules

The OTR 1442 is a self contained fiber transmission kit for the transport of 4 discreet SDI signals (or 4K / 12G uncompressed) over a single fiber link. The kit includes the fiber transmitter, fiber receiver and power supplies. This is an ideal solution for the transmission of multiple uncompressed SDI streams, or 4K up to 20km with zero losses.

Each SDI channel is fully independent. For 4K use the signal is split over 4 separate 3G SDI links (12G) and supports full 4K resolution at 60fps. The system can also be used for any combination of SDI signals, with a mix of formats and bit-rates if required. Each channel will automatically detect and relock SDI bit rates of 270Mbit, 1.48Gbit and 2.97Gbit.

An expansion port is included for the connection of the OTR 1441 to add 4 more SDI channels (for dual 4K transport), or add bidirectional Ethernet or Serial RS 232 data into the link.

LED Indicators are provided for channel presence and power. An optional 19" rack mount tray is available which can accommodate up to 4 modules (RFR 1018).



RFR 1018

19" Rack frame to mount up to 4 modules. No tools required, modules are clipped securely in place.

Technical Specifications

SDI I/O	4 x multi-format 3G/HD/SD-SDI inputs [OTX 1442] 4 x multi-format 3G/HD/SD-SDI outputs [ORX 1442] 75 Ω BNC connections
	SMPT E 259M-2008 , SMPT E 292-1:2012, SMPT E 292-2:2011 SMPT E 424M-2006 , DVB ASI
	Multi-standard / Multi-format operation auto-detect. Multi-rate relocking: 270Mbit / 1.48Gbit / 2.97Gbit
	Return Loss: > 15dB to 1.5Gbit and > 10dB to 2.97Gbit
	Automatic Cable EQ (Belden 1694A cable) 340m@270Mbit, 150m@1.58Gbit, 120m@3Gbit
Fiber I/O	1 x Fiber optic I/O port (COM port) 1 x Fiber optic expansion port (UPG port) LC/PC connections - Single Mode
	SMPT E 297M - 2006
	Internal CWDM Multiplexing Wavelengths : 1350nm, 1370nm, 1390nm, 1410nm Optical budget: 10.6dB Maximum distance [typical]: 20km (12 miles)
	Fiber activity LEDs for each channel
Power	+12VDC nominal. ORX1442 = 4.4W, OTX 1442 = 5.4W Supports external power input from 9 - 17 VDC 2 x Power LEDs provided
Physical	170 x 99.7 x 40.5mm (6.7" x 3.9" x 1.6) - (each Module) Weight: 600g (21.1oz) net - (each module)
Ambient	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)
Model #	OTR 1442 LC - (EAN# 4250479324374)
Includes	OTX 1442 - 4K Fiber Transmitter module ORX 1442 - 4K Fiber Receiver module 2 x 12VDC (brick) power supplies

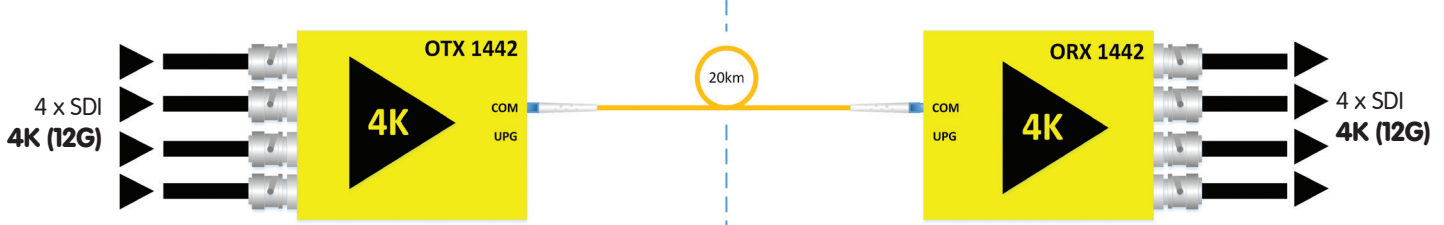
Note. Internal CWDM optical multiplexing is utilized within the modules. This kit should be considered a self contained point to point solution and should not be integrated into external CWDM systems. An expansion port is included on each module which can be used to add additional SDI channels from the OTR 1441, or a bidirectional Ethernet or Serial RS232 signal.

Specifications subject to change

Applications

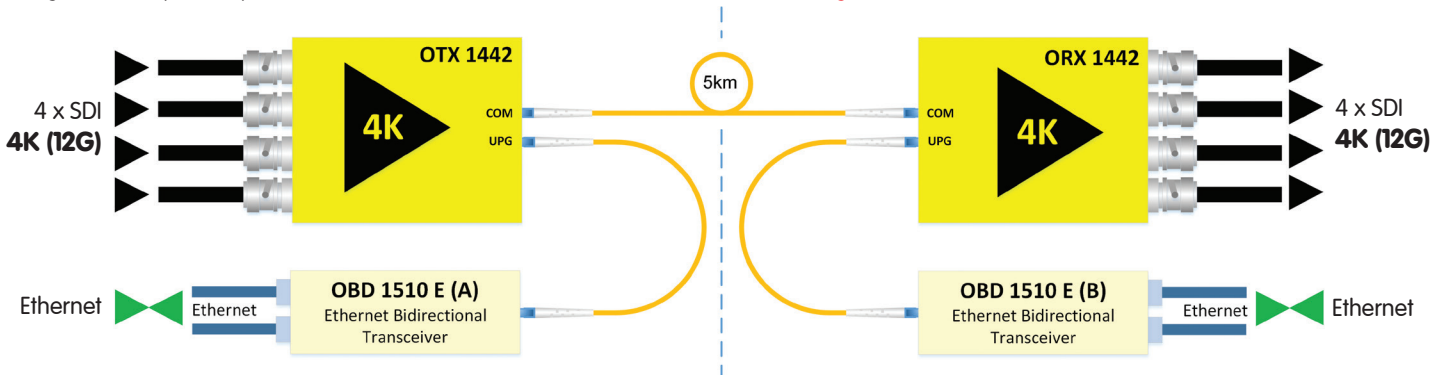
4 x SDI (4K 12G) Fiber Transport

This basic configuration is used for transporting up to 4 discreet SDI signals (SD/HD/3G) or it can be used for transporting a 4K (12G) signal over fiber.



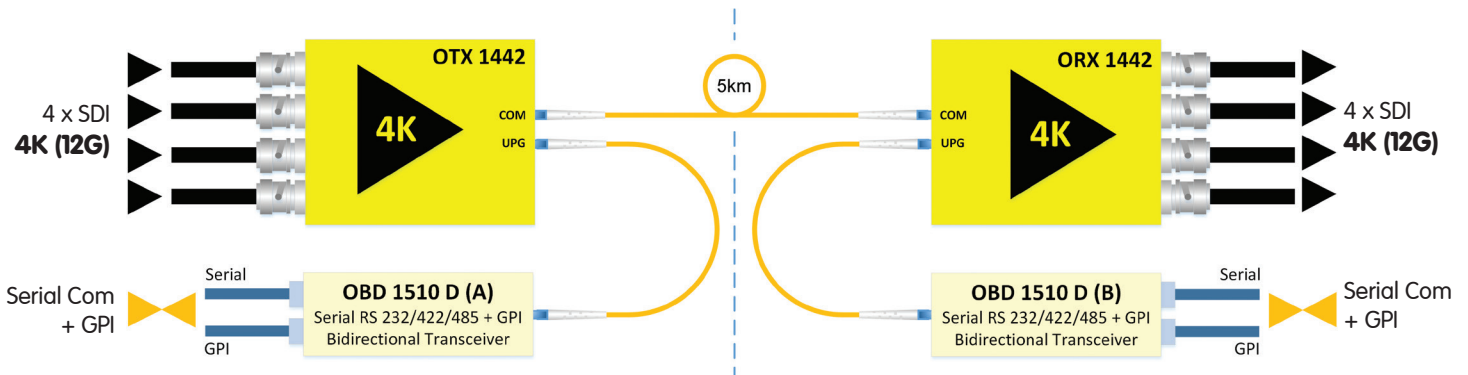
4 x SDI (4K 12G) Fiber Transport + Ethernet

This configuration transports 4 discreet SDI signals (SD/HD/3G) or 4K (12G) and also adds bidirectional Ethernet from the OBD 1510 E into the same fiber link using the UPG expansion port. **Note: Total distance is reduced to 5km when used in this configuration.**



4 x SDI (4K 12G) Fiber Transport + Serial RS 232 + GPI

This configuration transports 4 discreet SDI signals (SD/HD/3G) or 4K (12G) and also adds bidirectional Serial data (RS232/422/485) + GPI from the OBD 1510 D into the same fiber link using the UPG expansion port. **Note: Total distance is reduced to 5km when used in this configuration.**



Dual 4K and 4K Bidirectional Fiber Transport Solutions

Connecting the OTR 1441 into the expansion port will add 4 more SDI channels to the system which will facilitate the transport of dual 4k (12G) unidirectional signals over a single fiber link, or 4K (12G) bidirectional fiber transport over a single fiber link.

Please refer to the product information for the OTR 1441 for diagrams of these configurations.