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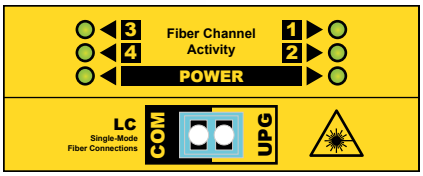
OTR 1441

LYNX | Centraal™ ✓ yelloGUI ✓

4K Fiber Transmission System



Features

- 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 reclocked
- 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

Description

The OTR 1441 is a self-contained fiber transmission kit for the transport of 4 discreet 3G-SDI signals (or a single 12G-SDI signal spread across 3G-SDI) 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 four separate 3G-SDI links 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 reclock SDI bit rates of 270Mbit/s, 1.5Gbit/s, and 3Gbit/s.

An expansion port is included for the connection of the OTR 1441 to add **4 more SDI channels** (or 8K/48G over a single fiber), **bidirectional ethernet** or **serial RS-232 data** into the link.

Technical Specifications

SDI Video	4x 3G-SDI inputs [OTX 1441] on 75 Ohm BNC connections 4x 3G-SDI outputs [ORX 1441] on 75 Ohm BNC connections			
	SMPTE 259M-2008 , SMPTE 292-1:2012, SMPTE 292-2:2011 SMPTE 424M-2006 , DVB ASI			
	Multi-standard / Multi-format operation auto-detect. Multi-rate reclocking: 270Mbit/s - 1.5Gbit/s - 3Gbit/s			
	Electrical Return Loss:		to 1.5GHz >15dB	to 3GHz >10dB
	Automatic cable EQ	270Mbit/s	1.5Gbit/s	3Gbit/s
		250m	190m	140m
			Belden 1694A	
Fiber Optical	1x Fiber I/O port (COM port) 1x Fiber expansion port (UPG port) Singlemode LC/PC connections			
	SMPTE 297M - 2006			
	Internal CWDM Multiplexing			
	Wavelengths:	1270nm, 1290nm, 1310nm, 1330nm		
	Optical budget:	10.6dB		
	Max. distance*	20km (12 miles)		
	Fiber activity LEDs for each channel			
Power	+12V DC nominal. (Supports power from 7 - 24V DC) OTX 1441: 4.1W / ORX 1441: 3.8W			
	2x Power LEDs on side per module			
Physical (per module)	Size (incl. connectors)	170 x 99.7 x 40.5mm (6.7" x 3.9" x 1.6")		
	Weight:	600g (21.1oz)		
Ambient	5 - 40ºC (41 - 104ºF) 90% Humidity (non condensing)			
Model #	OTR 1441	EAN# 4250479321151		
Includes	2 Modules, 2 Power Supplies			

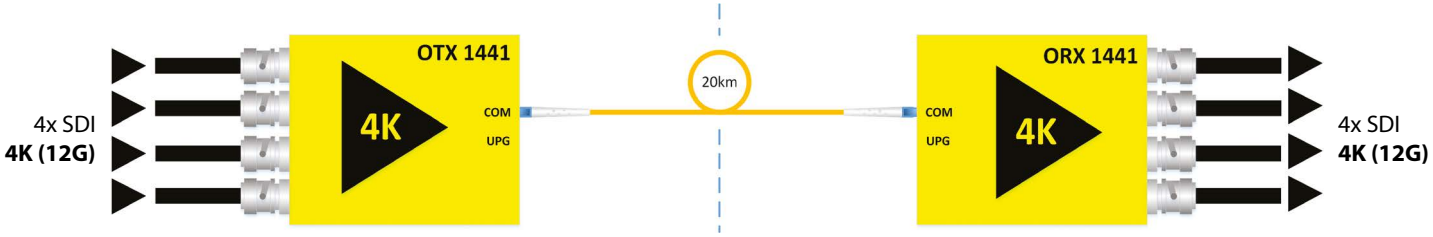
Note: Internal CWDM optical multiplexing is utilized within the modules. This kit should be considered a self contained point to point solution and should not be integrated into external CWDM systems. An expansion port is included on each module which can be used to add additional SDI channels from the OTR 1442.

*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.

Application Examples

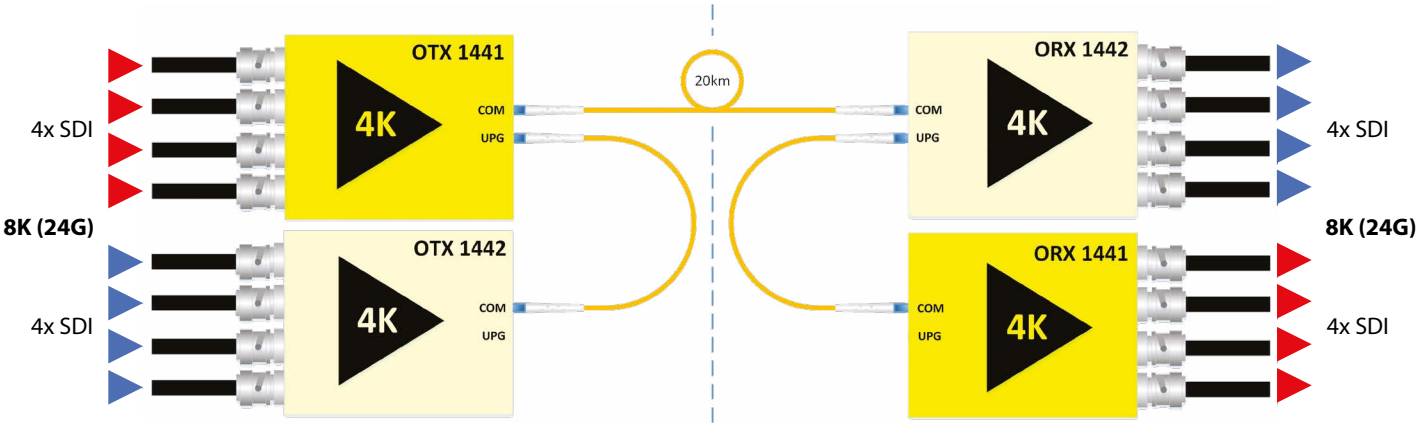
4x 3G-SDI (4K 12G) Fiber Transport

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.



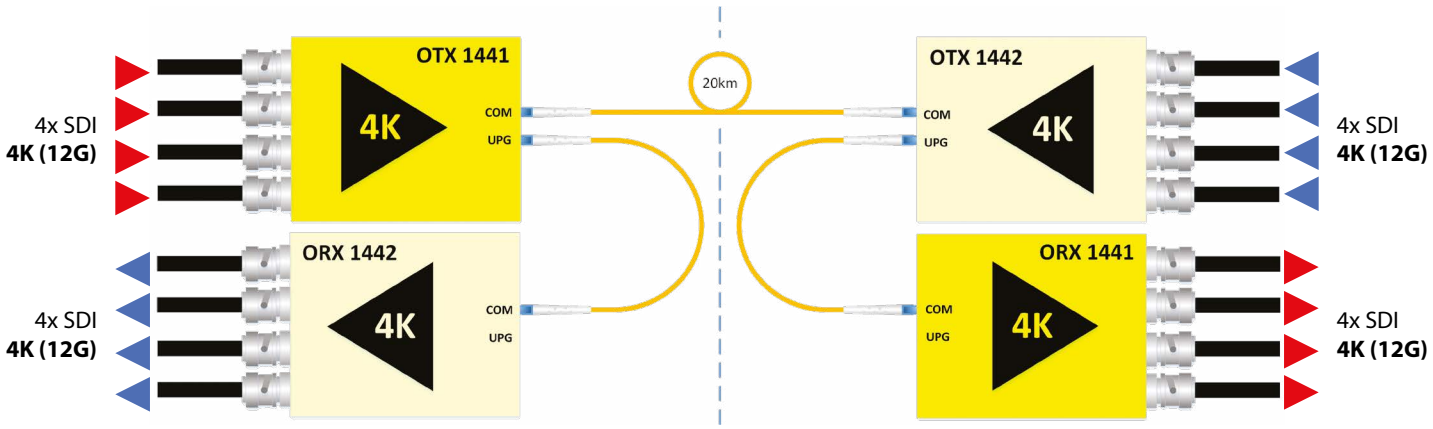
8x 3G-SDI (8K 24G) Fiber Transport

This configuration uses the UPG port to add more channels into the link from the OTR 1442. This can be used to transport 8 discreet SDI signals (SD/HD/3G) or it can be used for transporting a single 8K (24G) signal over a single fiber.



4 x 3G-SDI (4K 12G) Bidirectional Fiber Transport

This configuration uses the UPG port to add more channels into the link from the OTR 1442. This shows a bidirectional application sending and receiving 4 SDI channels, or sending and receiving 4K (12G) over a single fiber.



*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.

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Optional Accessories

Rack Frames

This yellobrik kit can be placed in a rack frame along others to build increasingly complex systems in a compact and easily accessible form factor.

The RFR 1018 is a passive (non powered) mounting tray for up to four individual OTR 1A41, OTR 1A42, OTR 1441, or OTR 1442 modules (e.g. OTX 1441, ORX 1441, etc.). The included mounting studs help securing the modules to the rack frame and to each other.

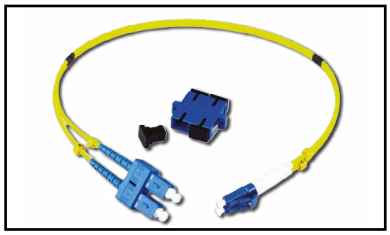
RFR 1018
19" Rack frame to mount up to 4 modules.

Fiber Adapter Cables

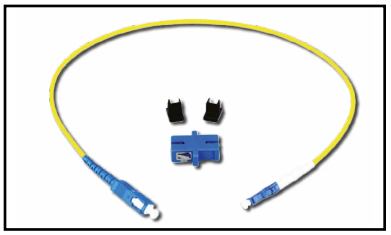
While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

To still allow the necessary flexibility in a professional setting we offer patch cables to convert LC to ST or SC fiber connections. These patch cables' insertion less and return loss are manually checked for each individual cable to allow for maximum precision when calculating the optical budget

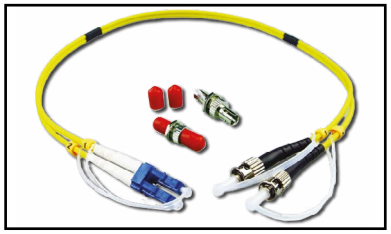
Besides the selection here we offer LC/FC and LC/LC patch cables.



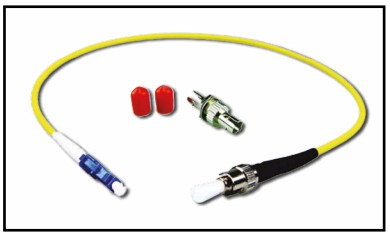
LC/SC Dup: LC/SC Duplex adapter cable



LC/SC Sim: LC/SC Simplex adapter cable



LC/ST Dup: LC/ST Duplex adapter cable



LC/ST Sim: LC/ST Simplex adapter cable

Power Adapter Options

The power requirements of this yellobrik allow for the usage of P-Tap or XLR connection based power sources.

Note: This does not replace the included power supply.

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.