OTR1442_R02

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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
	SMPTE 259M-2008, SMPTE 292-1:2012, SMPTE 292-2:2011, SMPTE 424M-2006
	Multi-standard / Multi-format operation auto-detect. Multirate reclocking: 270Mbit/s - 1.5Gbit/s - 3Gbit/s
	Return Loss: > 15dB to 1.5GHz > 10dB to 3GHz
	Automatic Cable EQ (Belden 1694A cable) 250m@270Mbit, 140m@1.5Gbit, 80m@3Gbit
Optical I/O	1 x Fiber optic I/O port (COM port) 1 x Fiber optic expansion port (UPG port) - **not available in SC variant** LC/PC or SC/PC connections - Singlemode - Fiber activity LEDS for each channel
	SMPTE 297M - 2006
	Internal CWDM [1270nm, 1290nm, 1310nm, 1330nm] Optical budget: 10.6dB Maximum distance [typical]: 20km (12 miles)
Power	+12V DC (7-24V DC) - 2 x Power LEDs provided **OTX 1442:** 4.1W / **ORX 1442:** 3.8 W

Optional Mounting Solutions

The optional RFR 1018 rack mount can be used to mount bigger sized yellobrik modules inside a 19" rack.

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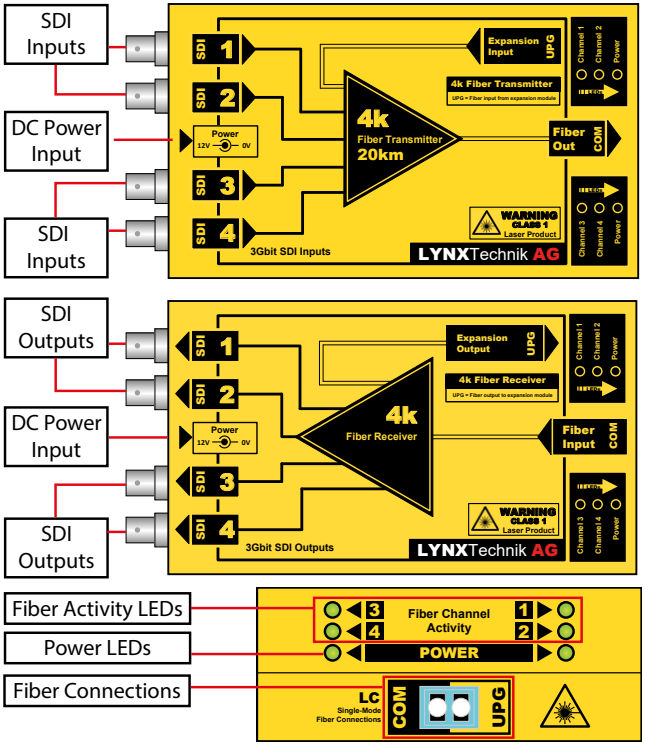
OTR 1442

4K (12G) Fiber Transmission System



WARNING: Module laser is active as soon as power is connected, **regardless of LED indication**

Introduction

The OTR 1442 is a self-contained fiber conversion solution for the transmission of up to 4 uncompressed SDI signals over a single fiber link (maximum 20km -12 miles). The kit includes an OTX 1442 fiber transmitter and an ORX 1442 fiber receiver and 2 power supplies.

Each SDI channel is independent and can transport any SDI format. For 4K applications 4x3G SDI links are typically used. Each SDI channel is transparent with support for embedded audio and any associated ancillary metadata in the SDI stream. The modules will auto-detect and re-clock SDI bit-rates of 270Mbit, 1.5Gbit and 3Gbit.

Connections

The SDI electrical input and outputs are BNC connections, and the fiber I/O is connected to the COM port on each module using LC or SC connectors. The UPG port is not available in the SC variant.

The module has no user settings, operation is fully automatic. The module supports hot plugging the connections.

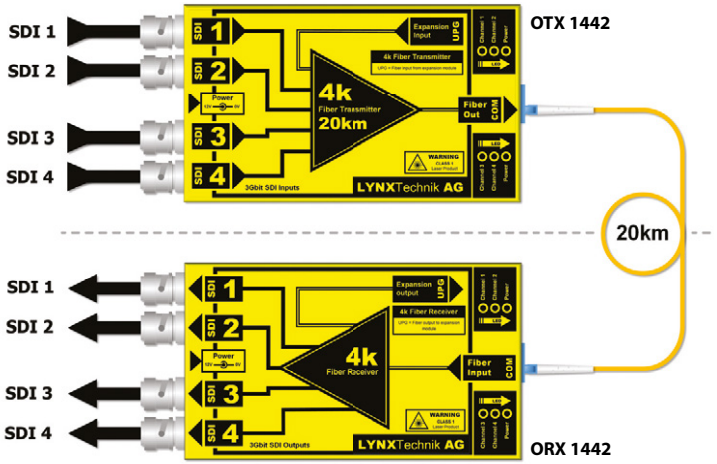
Note: The modules are CWDM devices and can only be used with SMF (Singlemode fiber). Multimode fiber is not supported.

Indicators

The module uses optical CWDM multiplexing internally. Fiber activity LEDs are provided which indicate the presence of valid SDI signals in the corresponding channel.

Two power LEDs are also provided and both need to be ON for normal operation.

Note: This system should be considered a closed loop point to point system and should not be integrated into an external CWDM system. A UPG port is provided to accommodate the addition of additional SDI channels into the single fiber link.



The fiber connection is made between each COM port. The UPG port is used to connect the OTR 1441 to add 4 more SDI channels.

Note: This is not possible with the SC variant since the UPG port is missing.

Power

2 x12V DC external power supplies are included. 12V DC is the nominal power level. An external DC input between 7-24V DC is supported (for battery operation).

DO NOT exceed 24V DC as damage to the module will result.

Power Lead Strain Relief

There is a small extruded loop above the power connector which can be used with the supplied tie-wrap to secure the power lead.