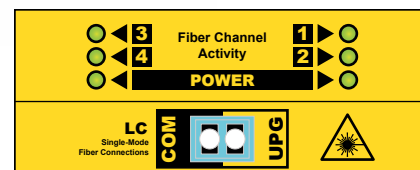


## 8K Fiber Transmission System

LYNX | Centraal™

yelloGUI✓



### Features

- Support for 4 independent 12G/6G/3G/1.5G/270M channels
- Transport 8K (uncompressed) signals up to 10km\* (6.2miles)
- Each channel supports resolutions up to 2160p/60Hz
- Each channel is 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 up to 4 modules

### Description

The OTR 1A41 is a self contained fiber transmission kit for the transport of 4 discreet 12G-SDI signals (or 8K / 48G 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 12K signals.

Each SDI channel is fully independent. For 8K use, the signal is split over 4 separate 12G-SDI links (48G) and supports full 8K 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, 3Gbit/s, 6Gbit/s and 12Gbit/s.

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).

**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.

### Technical Specifications

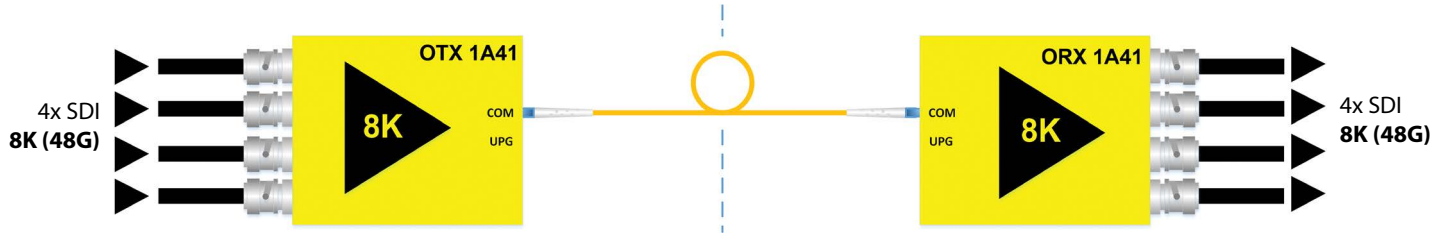
|                                      |                                                                   |                                            |                  |                 |
|--------------------------------------|-------------------------------------------------------------------|--------------------------------------------|------------------|-----------------|
| SDI Video                            | 4x 12G-SDI inputs on 75 Ohm BNC connections (OTX 1A41)            |                                            |                  |                 |
|                                      | 4x 12G-SDI outputs on 75 Ohm BNC connections (ORX 1A41)           |                                            |                  |                 |
|                                      | SMPTE 259M-2008 , SMPTE 292-1:2012, SMPTE 292-2:2011              |                                            |                  |                 |
|                                      | SMPTE 424M-2006 , SMPTE ST-2081, SMPTE ST-2082                    |                                            |                  |                 |
|                                      | Multi-standard / Multi-format operation auto-detect.              |                                            |                  |                 |
|                                      | Multi-rate reclocking: 270Mbit/s - 1.5Gbit/s - 3Gbit/s - 12Gbit/s |                                            |                  |                 |
|                                      | Electrical Return Loss:                                           | to 1.5GHz<br>>15dB                         | to 3GHz<br>>10dB | to 6GHz<br>>7dB |
| Automatic cable EQ                   | 270Mbit/s                                                         | 1.5Gbit/s,                                 | 3Gbit/s          | 12Gbit/s        |
|                                      | 250m                                                              | 190m                                       | 140m             | 80m             |
|                                      | Belden 1694A                                                      |                                            | Belden 4794R     |                 |
| Fiber Optics                         | 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*                       | 10km (6.2 miles)                                                  |                                            |                  |                 |
| Fiber activity LEDs for each channel |                                                                   |                                            |                  |                 |
| Power                                | +12V DC 3.7W nominal. (Supports input range 7 - 24V DC)           |                                            |                  |                 |
|                                      | 2x Power LEDs on side per module                                  |                                            |                  |                 |
| Physical (per module)                | Size (incl. connectors)                                           | 170 x 99.7 x 40.5mm<br>(6.7" x 3.9" x 1.6) |                  |                 |
|                                      | Weight:                                                           | 600g (21.1oz)                              |                  |                 |
| Ambient                              | 5 - 40°C (41 - 104°F) 90% Humidity (non condensing)               |                                            |                  |                 |
| Model #                              | OTR 1A41                                                          | EAN# 4250479326637                         |                  |                 |
| Includes                             | 2 Modules, 2 Power Supplies                                       |                                            |                  |                 |

\*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

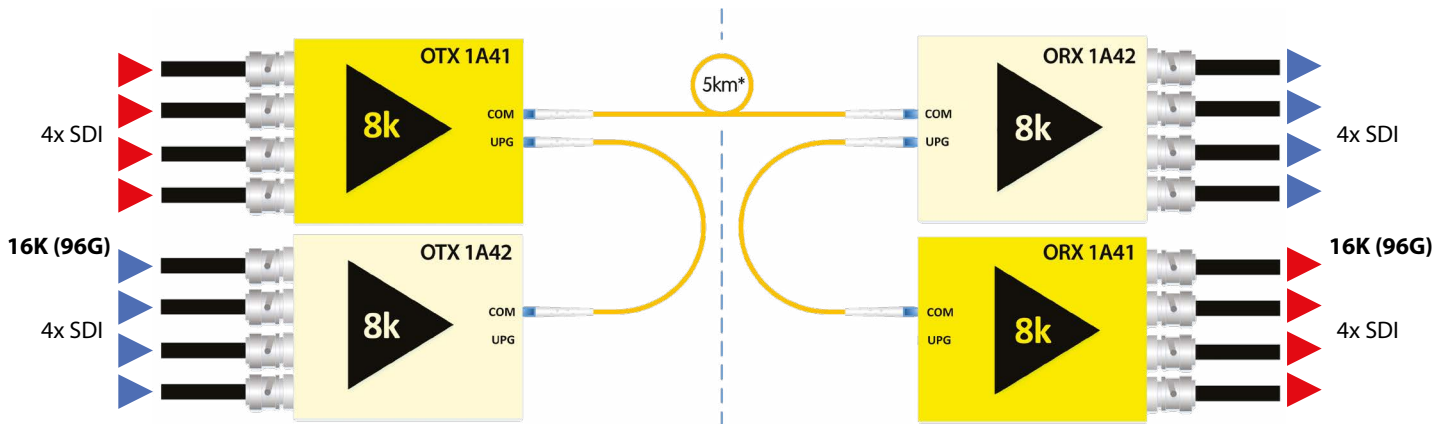
#### 4x SDI (8K 48G) Fiber Transport

This basic configuration is used for transporting up to 4 discreet SDI signals (SD/HD/3G/6G/12G) or it can be used for transporting a 8K (48G) signal over fiber.



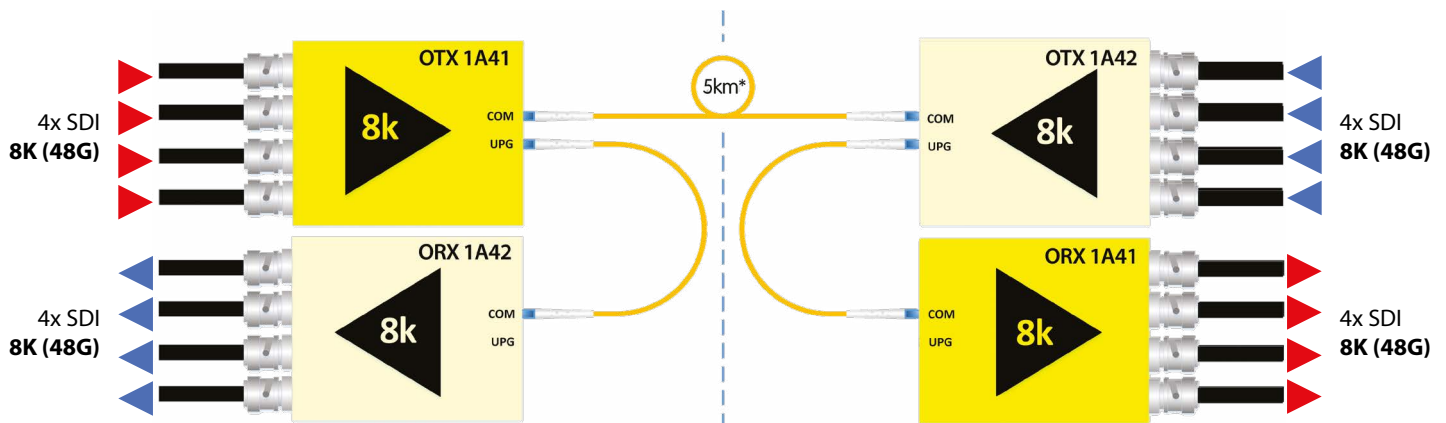
#### 8x SDI (16K 96G) Fiber Transport

This configuration uses the UPG port to add more channels into the link from the OTR 1A42. This can be used to transport 8 discreet SDI signals (SD/HD/3G/6G/12G) or it can be used for transporting a single 8K (48G) signal over a single fiber.



#### 4 x SDI (8K 48G) Bidirectional Fiber Transport

This configuration uses the UPG port to add more channels into the link from the OTR 1A42. This shows a bidirectional application sending and receiving 4 SDI channels, or sending and receiving 8K (48G) over a single fiber.



### 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**

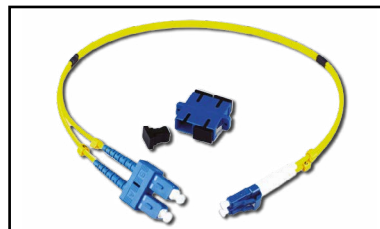
19" Rack frame to mount up to 4 modules.

#### Fiber Adapter Cables

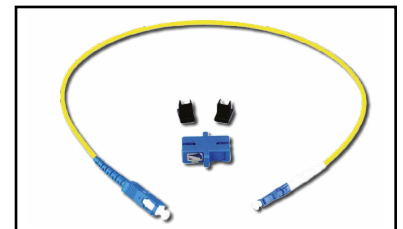
While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

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 loss and return loss are manually checked for each individual cable to allow for maximum precision when calculating the optical budget

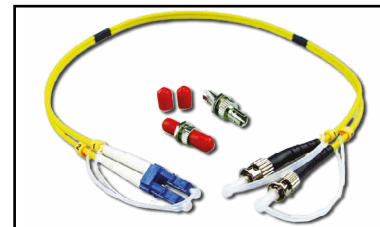
Besides the selection here we offer LC/FC and LC/LC patch cables.



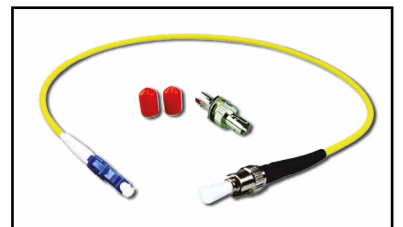
**LC/SC Dup:** LC/SC Duplex adapter cable



**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.