# yellobrik®

## OTT 1842-1

## Dual Channel 3G SDI to Fiber Transmitter (CWDM)

Lower Wavelength

Higher Wavelength

**3G CWDM**
Dual SDI to Fiber Transmitter

**LYNX**Technik AG

WARNING CLASS 1 Laser Product

Power 12V ⏻ 0V

LEDs
TX1
TX2
Power

yellobrik
Made in Germany
OTT 1842
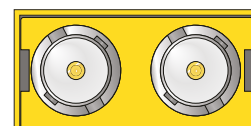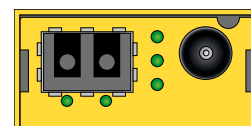
## Features

- Dual Channel
- Supports SDI video inputs up to 3G (1080p60)
- 3G Level A and Level B support (all formats)
- Auto reclocking 270M, 1.5G, and 3G
- Error free optical transmission
- 18 Wavelength selections (ITU-T G.694.2)
- Up to 40km* (24.8 miles) @ 3Gbit/s
- Duplex LC/PC single mode optical connections
- Supports hot swapping and hot plugging

## Description

The OTT 1842-1 is a compact CWDM dual channel SDI to fiber optic transmitter designed to combat the restrictions involved with the distribution of uncompressed broadcast quality video signals over long distances. 18 wavelengths are available.

When combined with the dual-channel fiber optic to SDI receiver module ORR 1802-2, and the OCM 1891/1892 CWDM multiplexers you have a very cost-effective CWDM fiber system for up to 18 signals in a single fiber link.

The OTT 1842-1 has two completely independent channels. Each will auto-detect and re-clock any 270Mbit/s, 1.5Gbit/s, and 3Gbit/s SDI source before optical transmission. The module is fully compatible with 3G Level A and Level B formats.

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

| Wavelengths | Power | Option # | EAN / UPC |
|---|---|---|---|
| 1270nm, 1290nm | | OH-TT-4-1270-1290-LC | 4250479327290 |
| 1310nm, 1330nm | | OH-TT-4-1310-1330-LC | 4250479331334 |
| 1350nm, 1370nm | | OH-TT-4-1350-1370-LC | 4250479335370 |
| 1390nm, 1410nm | | OH-TT-4-1390-1410-LC | 4250479339415 |
| 1430nm, 1450nm | -4...+2dBm | OH-TT-4-1430-1450-LC | 4250479343450 |
| 1470nm, 1490nm | | OH-TT-4-1470-1490-LC | 4250479347496 |
| 1510nm, 1530nm | | OH-TT-4-1510-1530-LC | 4250479351530 |
| 1550nm, 1570nm | | OH-TT-4-1550-1570-LC | 4250479355576 |
| 1590nm, 1610nm | | OH-TT-4-1590-1610-LC | 4250479359611 |

## Technical Specifications

| SDI Input | 2 x SDI video on 75 Ohm BNC connector (two independent channels) | | |
|---|---|---|---|
| | SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI | | |
| | Multi-standard operation from 270Mbit/s to 3Gbit/s | | |
| | 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 | 140m | 80m |
| | Belden 1694A cable | | |

| Optical Output | 2 x fiber optic outputs Duplex (singlemode) using LC/PC Connections |
|---|---|
| | SMPTE 297M - 2006 |
| | Wavelength: CWDM selection. See select SFP table |
| | Optical power: see selected SFP option |
| | 2x TX active LED on side of module |
| | Max. distance* max. 40km (24.8 miles) @ 3Gbit/s |

| Power | +12V DC @ 1.9W nominal - ( supports 7 - 24V DC input range ) |
|---|---|
| | Power LED on side of module |

| Physical | Size (incl.connectors) | 140mm x 42mm x 22mm (5.51" x 1.65" x 0.86") |
|---|---|---|
| | Weight | 125g (4.4oz) |

| Ambient | 5 - 40ºC (41 - 104ºF) 90% Humidity (non condensing) | |
|---|---|---|
| Model # | OTT 1842-1 | EAN# 4250479318427 |
| Includes | Module, AC power supply | |

*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.

**Note:** This yellobrik **DOES NOT INCLUDE** the fiber SFP module. Please specify the required SFP option from the option list.

## LYNXTechnik | Broadcast Television Equipment

www.lynx-technik.com

## Optional Accessories

### Rack Frames

This yellobrik can be placed in a rack frame along others to build increasingly complex systems, all monitored and controlled with a rack controller (RCT 1012) and server module (SRV 1000) via a PC or MAC using LynxCentraal.

The RFR 1200 offers additional power redundancy with GPI alert. It automatically closes a connection between the A and B terminals on power failure.

The RPS A100 is a 100W power supply, which can be mounted at the rear end of the RFR 1200 with an RXT 1001 power supply holder for rack frames.
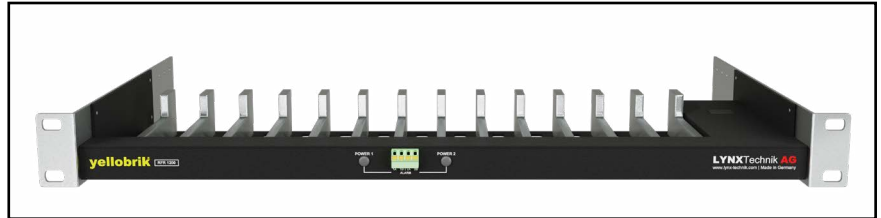


**RFR 1200:** yellobrik Rack Frame



**RPS A100:** 100W Power supply



**RXT 1001:** Power Supply Holder

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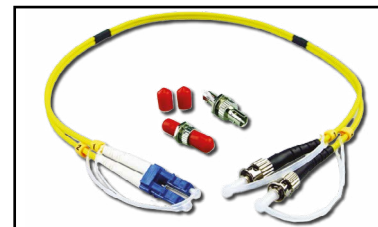
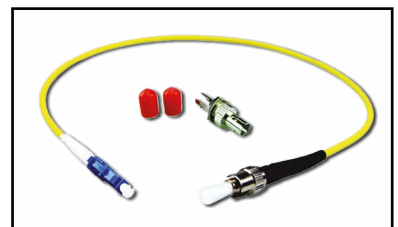Besides the selection here we offer LC/FC and LC/LC patch cables.
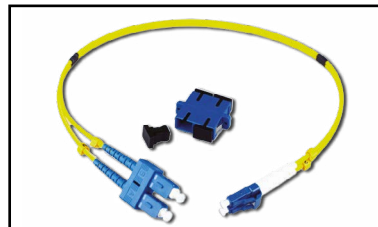


**LC/SC Dup:** LC/SC Duplex adapter cable
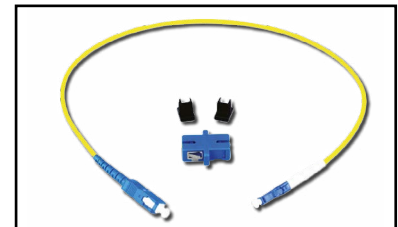


**LC/SC Sim:** LC/SC Simplex adapter cable



**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.