



OTR1810\_R04

# yellobrik®

# yellobrik®

## Quick Reference

### Technical Specifications

**SDI Video** 1 x SDI video input, 1 x SDI Video output  
75 Ohm BNC connectors

---

SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI

---

Multi-standard operation from 270Mbit/s to 3Gbit/s

---

Multi-rate relocking: 270Mbit/s - 1.48Gbit/s - 3Gbit/s

---

Return Loss: > 15dB to 1.5GHz and > 10dB up to 3GHz

---

Automatic cable EQ (Belden 1694A cable)  
250m @ 270Mbit/s, 140m @ 1.5Gbit/s, 80m @ 3Gbit/s

**Fiber Optic** 1 x fiber optic input, 1 x fiber optic output  
Duplex using LC Connections

SMPTE 297M - 2006

Singlemode Version: OTR 1810-1 LC  
Transmitter: 1310nm (-5dBm)  
Receiver: 1260nm to 1620nm (-16dBm)  
Max. distance 10km (6.2 miles) @ 3Gbit/s

Multimode Version: OTR 1810-1 MM  
Transmitter: 850nm (-7dBm to -2dBm)  
Receiver: 750nm to 880nm (-15dBm)  
Max. distance 300m (984 feet) @ 3Gbit/s

TX active LED, and RX active on side of module

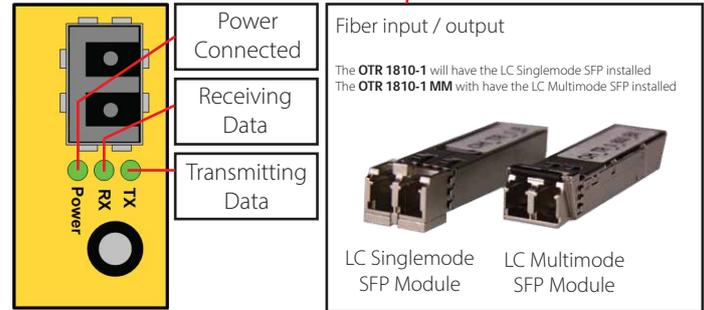
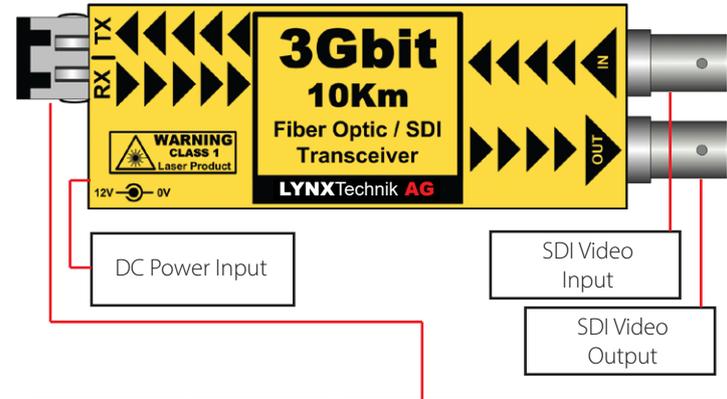
**Power** +12VDC power supply (included)  
Supports external power input from 9 - 14 VDC (1.6W)

We are constantly adding additional yellobrik modules. Please visit our website for the latest product updates.

[www.lynx-technik.com](http://www.lynx-technik.com)

**LYNXTechnik AG®** | Broadcast Television Equipment

### OTR 1810-1 LC / OTR 1810-1 MM 3Gbit SDI / Fiber Optic Transceiver



**WARNING**  
CLASS 1M LASER PRODUCT



**LASER RADIATION**  
Do not view directly with  
optical instruments

## Connections

The SDI video input and output is connected to the corresponding 75 Ohm BNC connections provided (up to 3Gbit). The fiber connections are made to the fiber SFP sub module as indicated on the module.

Both versions (OTR 1810-1 LC - Singlemode, and OTR 1810-1 MM - Multimode) use a dual LC simplex connection. Please ensure the fiber cable used is of the correct type for the module. (Singlemode or Multimode)

The module fiber connection is supplied with a rubber plug installed, this is to prevent dust contamination. Please retain the plug and use if the cables are ever disconnected from the module. An example of a LC connector is shown below:



## Operation

The OTR 1810-1 combines an independent fiber optic transmitter and receiver into a single package. Different SDI video formats and standards can be transmitted and received. Operation of the receiver and transmitter is automatic. For transmission, the Input video format is automatically detected and the video signal is reclocked and then transmitted over the fiber optic connection. For reception, the received SDI format is detected automatically and provided on the SDI output connection (up to 3Gbit)

The module supports hot swapping and hot plugging of connections.

No user settings are provided for this module.

## Distance

Two versions of the module are available. Each version is supplied with a different SFP sub module :

*SFP Fiber sub modules plug into main module fiber socket.*



**OTR 1810-1 LC** - This is designed for use with Singlemode cable and has a max distance of approx **10km (6.2 miles)** for SDI signals up to 3Gbit/s

**OTR 1810-1 MM** - This is designed for use with Multimode cable and has a max distance of approx **300m (984 feet)** for SDI signals up to 3Gbit/s

## Power

The module requires a 12V DC power input and a LED is provided to confirm power is connected. A power supply is provided, but if applying your own power, please provide a clean 12V DC power source. Module power consumption is approx 1.6W

## Power Lead Strain Relief

The module has a small hole in the case located above the power connection to prevent the power lead being accidentally pulled out. Use the supplied tie-wrap and secure the lead as shown below.

