

## 3Gbit Bidirectional SDI/Fiber Transceiver

- Supports SDI video up to 3Gbit/s (1080p60)
- 3Gbit Level A and Level B support (all formats)
- Auto relocking 270Mbit / 1.5Gbit / 3Gbit
- Bidirectional - send and receive on single fiber
- Error free optical connections
- Up to 10km (6.2 miles) @ 3Gbit/s
- Simplex LC/PC singlemode fiber connection
- Supports hot swapping and hot plugging

The OBD 1810-2 LC is a bidirectional Fiber Optic to SDI transmitter and receiver which uses a single fiber link supplied in a compact self contained package. It is a convenient and cost-effective solution to combat the restrictions involved with the distribution of uncompressed broadcast quality video signals over long distances.

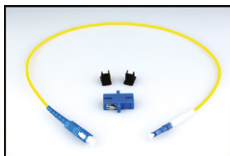
The OBD 1810-2 LC modules are supplied in pairs, one Type A and one Type B which work together in a WDM closed loop application. Each module has an electrical SDI in and SDI out connection and uses a single fiber link between the two.

Each channel is fully independent and can have different standards and formats of SDI video. The modules auto-detect and re-clock any 270Mbit, 1.5Gbit and 3Gbit SDI source prior to conversion. The modules are fully compatible with 3Gbit Level A and Level B formats.

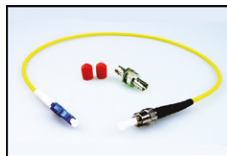
**Note:** This system used WDM optical multiplexing and should only be used in point to point applications. This solution cannot be integrated into a CWDM multiplexed system.

### Fiber Adapter Options

These adapter kits allow the use of ST or SC fiber connections on the module. SMF 0.5m (19.6") tail introduces less than 0.25dB attenuation.



Model# **LC/SC SIM**  
LC/PC to SC/PC Adapter



Model# **LC/ST SIM**  
LC/PC to ST/SC Adapter

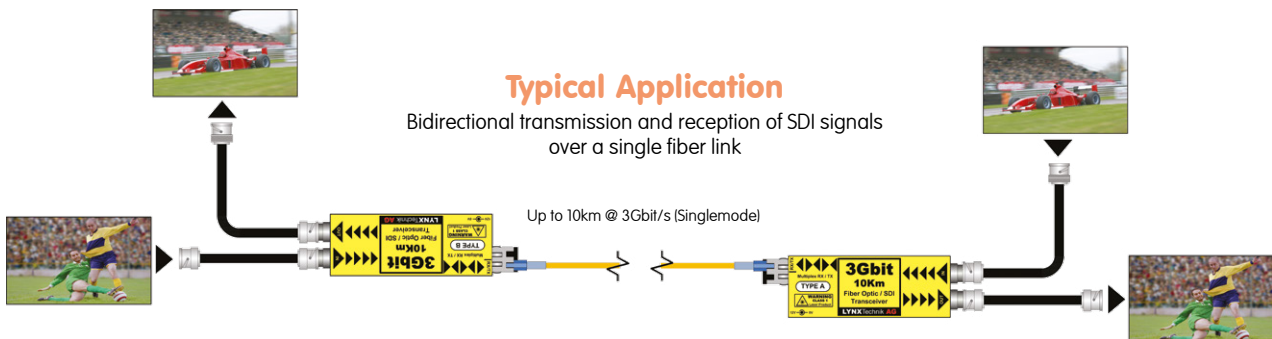


### Technical Specifications

<b>SDI Video</b>	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 - 1.5Gbit/s - 3Gbit/s  Electrical Return Loss: >15dB from 5MHz to 1.5GHz, >10dB from 1.5GHz to 3GHz  Automatic cable EQ (Belden 1694A cable) 340m @ 270Mbit/s, 150m @ 1.5Gbit/s, 120m @ 3Gbit/s
<b>Fiber Optic</b>	1 x Bidirectional fiber connection (LC/PC Connection)  SMPTE 297M - 2006  1310nm and 1550nm (WDM)  11dB Optical Budget  TX and RX active LEDs on side of module  Max. distance 10km (6.2 miles) @ 3Gbit/s (single mode)
<b>Power</b>	+12VDC @ 2.7W nominal for each module - ( supports 7 - 16VDC input range )
<b>Physical (each module)</b>	Size: 140mm x 42mm x 22mm (5.51" x 1.65" x 0.86") including connectors Weight: 125g (4.4oz)
<b>Ambient</b>	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)
<b>Model #</b>	OBD 1810-2 LC (pair) - ( EAN# 4250479318175 )
<b>Includes</b>	2 x OBD 1810-2 LC modules (Type A and Type B), 2 x AC power supplies

### Typical Application

Bidirectional transmission and reception of SDI signals over a single fiber link



Specifications subject to change