

## 3Gbit Bidirectional SDI/Fiber Transceiver

- Supports SDI video up to 3Gbit/s (1080p60)
- 3Gbit Level A and Level B support (all formats)
- Auto reclocking 270Mbit / 1.48Gbit / 2.97Gbit
- 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 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.

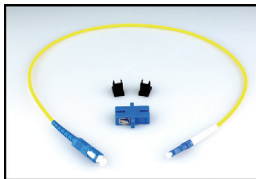
The OBD 1810 modules are supplied in pairs, one Type A and one Type B which work together in a WDM closed loop application. Each module has an electrical SDI in and SDI out connection and uses a single fiber link between the two.

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.

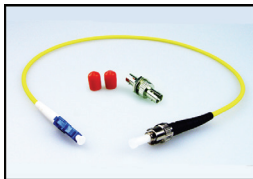
**Note.** This system used WDM optical multiplexing and should only be used in point to point applications. This solution cannot be integrated into a CWDM multiplexed system.

### Fiber Adapter Options

These adapter kits allow the use of ST or SC fiber connections on the modules. 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

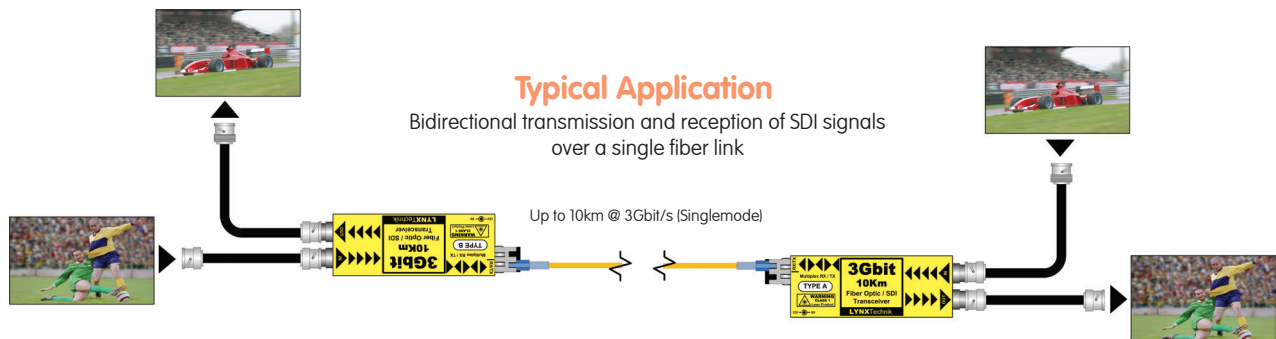


### Technical Specifications

<b>SDI Video</b>	1 x SDI video input 1 x SDI Video output 75 Ohm BNC connectors
	SMPTTE 424M, SMPTTE 292M, SMPTTE 259M, DVB-ASI
	Multi-standard operation from 270Mbit/s to 3Gbit/s
	Multi-rate reclocking 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
<b>Fiber Optic</b>	1 x Bidirectional fiber connection (LC/PC Connection)
	SMPTTE 297M - 2006
	1310nm and 1550nm (WDM)
	14dB 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 (pair) - (EAN# 4250479318175)
<b>Includes</b>	2 x OBD 1810 modules (Type A and Type B), 2 x AC power supplies, plastic transport case.

### Typical Application

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



Specifications subject to change