

12G Bidirectional SDI/Fiber Transceiver

- Supports SDI video up to 12G (2160p60)
- 3G Level A and Level B support (all formats)
- Auto relocking 270Mbit/s, 1.5Gbit/s, 3Gbit/s, 6Gbit/s, and 12Gbit/s
- Bidirectional - send and receive on single fiber
- Error free optical connections
- Up to 10km (6.2 miles) @ 12Gbit/s
- Simplex LC/PC singlemode fiber connection
- Supports hot swapping and hot plugging

The OBD 1410 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 1410 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/s, 1.5Gbit/s, 3Gbit/s, 6Gbit/s, or 12Gbit/s SDI source prior to conversion. The modules are fully compatible with 3G 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.

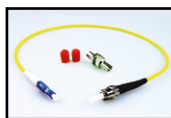
*Distance is an approximation. Actual distances achieved can be longer or shorter depending on the type of cable. Determine link losses and perform optical budget calculations to ensure correct operation.

Fiber Adapter Options

These adapter kits allow the use of ST, SC or FC fiber connections on the module.



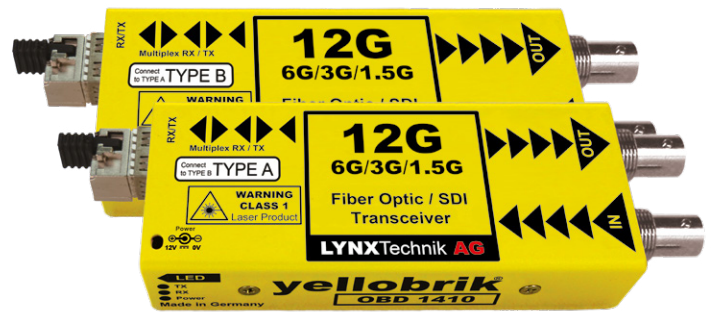
Model# **LC/SC SIM**
LC/PC to SC/PC Adapter



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



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



Technical Specifications

SDI Video	1 x SDI input on 75 Ohm BNC connector			
	1 x SDI output on 75 Ohm BNC connector			
	SMPT E 2082-1, SMPT E 2081-1, SMPT E 424M, SMPT E 292M, SMPT E 259M			
Multi-standard operation from 270Mbit/s to 12Gbit/s				
Multi-rate relocking: 270Mbit/s - 1.5Gbit/s - 3Gbit/s - 6Gbit/s - 12Gbit/s				
Electrical Return Loss:	to 1.5GHz	to 3GHz	to 6GHz	to 12GHz
	>15dB	>10dB	>7dB	>4dB
Automatic cable EQ:	1.5Gbit/s	3Gbit/s	6Gbit/s	12Gbit/s
	220m	150m	90m	80m
		Belden 1694A		Belden 4794R cable
Fiber Optics	1 x Bidirectional fiber connection (LC/PC Connection)			
	SMPT E 2082, SMPT E 2081, SMPT E 424M, SMPT E 292M, SMPT E 259M			
	Wavelength:	Type A	TX: 1270nm / RX: 1330nm (WDM)	
	Type B	TX: 1330nm / RX: 1270nm (WDM)		
Optical power:	Type A / B	-3dBm to +3dBm		
RX Sensitivity	Type A / B	-14dBm @1.5Gbit/s		
		-10dBm @12Gbit/s		
TX & RX active LED on side of module				
Max. distance*	max. 10km (6.2 miles) @ 3Gbit/s			
Power	+12V DC @ 1.9W nominal - (supports 7 - 24V DC input range)			
Power LED on side of module				
Physical (per module)	Size	140mm x 42mm x 22mm		
	(incl. connectors)	(5.51" x 1.65" x 0.86")		
Weight	125g (4.4oz)			
Ambient	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)			
Model #	OBD 1410	EAN# 4250479327450		
Includes	2x Modules, 2x SFP Modules, 2x AC power supply			

Typical Application

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

Up to 10km* @ 12Gbit/s (Singlemode)

