yellobrik® OBD 1410

12G-SDI to Fiber Transceiver

- Supports SDI video up to 12G-SDI (2160p60)
- 3G Level A and Level B support (all formats)
- Auto reclocking 270Mbit/s, 1.5Gbit/s, 3Gbit/s, 6Gbit/s, and 12Gbit/s
- Bi-Directional converter over WDM Single Fiber Link
- 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 bi-directional Fiber to 12G-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 kit includes 2 modules with their power supplies, Type A and Type B which work together in a WDM closed loop environment.
Each module has a 12G-SDI input and output. It uses a Simplex (single fiber) link between the two devices. Each channel is fully independent and can support different standards and formats of SDI video. The modules auto-detect and re-clock any 12G/6G/3G/1.5G-SDI source prior to conversion. The modules are fully compatible with 3G Level A and Level B formats.

As with all yellobrik modules, it is compatible with the RFR 1200 rack frame, which provides power redundancy.

Note: The system is designed for closed-loop, point-to-point operation and must not be connected to an external CWDM system. The modules require single-mode fiber; multi-mode fiber is not supported.

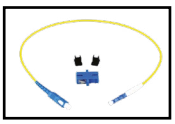
*Distance is an approximation. Actual distances achieved can be longer or shorter depending on the type of cable. Determine link losses and perform optical budget calculations to ensure correct operation.

Technical Specifications

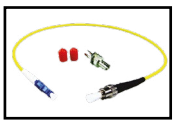
SDI Video	1x SDI input on 75 Ohm BNC connector 1x SDI output on 75 Ohm BNC connector				
	SMPTE 2082-1, SMPTE 2081-1, SMPTE 424M, SMPTE 292M, SMPTE 259M				
	Multi-standard operation from 270Mbit/s to 12Gbit/s				
	Multi-rate reclocking: 270Mbit/s - 1.5Gbit/s - 3Gbit/s - 6Gbit/s - 12Gbit/s				
	Electrical Return Loss:	to 1.5GHz >15dB	to 3GHz >10dB	to 6GHz >7dB	to 12GHz >4dB
	Automatic cable EQ:	1.5Gbit/s	3Gbit/s	6Gbit/s	12Gbit/s
		220m	150m	90m	80m
		Belden 1694A		Belden 4794R cable	
Fiber I/O	1x Simplex Bi-directional fiber connection (LC/PC Connection)				
	SMPTE 2082, SMPTE 2081, SMPTE 424M, SMPTE 292M, SMPTE 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 (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 #	OBD 1410	EAN# 4250479327450			
Includes	2x Modules, 2x SFP Modules, 2x AC power supply				

Fiber Adapter Options

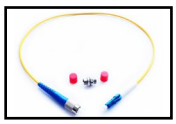
These adapter kits allow the use of ST, SC or FC fiber connections on the module.



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

Typical Application

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

