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OBD 1414

LYNX | Centraal™ yelloGUI
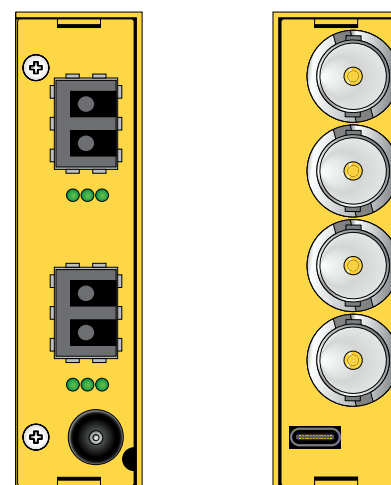
4-Channel 12G-SDI Fiber Transceiver

Features

- Supports 12G-SDI video up to 2160p60
- 3G Level A and Level B support (all formats)
- Auto reclocking 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

Description

The OBD 1414 is a bidirectionnal fiber transmitter and receiver which uses two single fiber links in a compact form factor. It is a convenient and cost-effective solution to optimize the distribution of uncompressed broadcast quality video signals over long distances.

The OBD 1414 modules are supplied in pairs, one Type A and one Type B which work together in a WDM closed loop application. Each module has two electrical SDI input and two SDI output BNC connectors. They use two single fiber links between the modules.

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.

Technical Specifications

| SDI Video	2x 12G-SDI inputs on 75 Ohm BNC connector			
	2x 12G-SDI outputs 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 Optics	2 x Simplex Transceiver 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) @ 12Gbit/s		
Power	+12V DC @ 3.4W excl. SFPs - (supports 7 - 24V DC input range)			
	Power LED on side of module			
Physical (per module)	Size (incl.connectors)	140mm x 83.8mm x 22mm (5.51" x 3.29" x 0.86")		
	Weight	168g/6oz excl. SFPs, 268g/9.5oz incl. SFPs		
Ambient	5 - 40ºC (41 - 104ºF) 90% Humidity (non condensing)			
Model #	OBD 1414	EAN# 425048072988		
Includes	2x Modules, 2x SFPs per Module, 2x Power Supplies			

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Optional Accessories

Rack Frames

This yellobrik can be placed in a rack frame along others to build increasingly complex systems, all monitored and controlled with a rack controller (RCT 1012) and server module (SRV 1000) via a PC or MAC using LynxCentraal.

The RFR 1200 offers additional power redundancy with GPI alert. It automatically closes a connection between the A and B terminals on power failure.
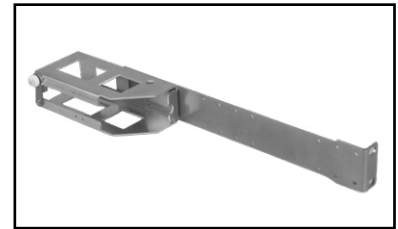
The RPS A100 is a 100W power supply, which can be mounted at the rear end of the RFR 1200 with an RXT A100 power supply holder for rack frames.
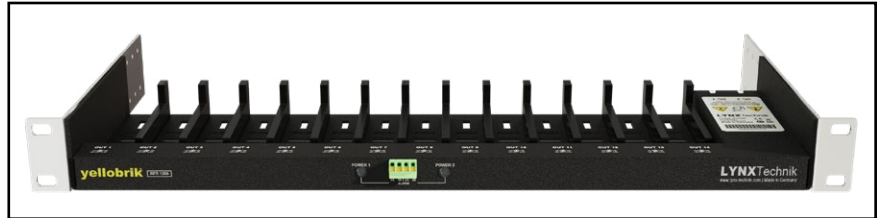
RFR 1200: yellobrik Rack Frame

**RPS A100:** 100W Power supply

RXT A100: Power Supply Holder
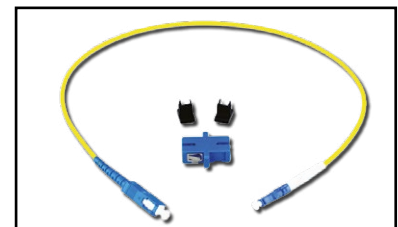
Fiber Adapter Cables

While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

To still allow the necessary flexibility in a professional setting we offer patch cables to convert LC to ST or SC fiber connections. These patch cables' insertion less and return loss are manually checked for each indiviQuad cable to allow for maximum precision when calculating the optical budget
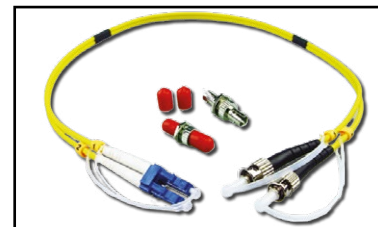
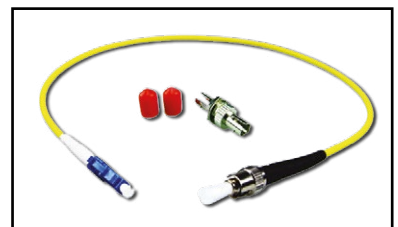Besides the selection here we offer LC/FC and LC/LC patch cables.
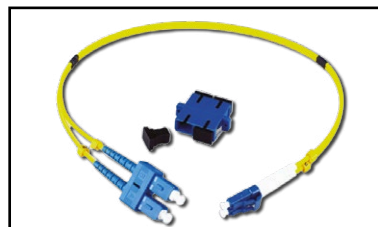
LC/SC Dup: LC/SC Duplex adapter cable

LC/SC Sim: LC/SC Simplex adapter cable

LC/ST Dup: LC/ST Duplex adapter cable

LC/ST Sim: LC/ST Simplex adapter cable

Power Adapter Options

The power requirements of this yellobrik allow for the usage of P-Tap or XLR connection based power sources.

Note: This does not replace the included power supply.

P-TAP 1000
Use with a standard battery P-TAP power source.

XLR 1000
Use with a standard 4 pin XLR camera battery power source.

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