yellobrik®

ORX 1802-2

Fiber to 3G-SDI Receiver





Features

- Supports SDI video inputs up to 3Gbit/s (1080p60)
- 3Gbit Level A and Level B support (all formats)
- Auto reclocking 270Mbit/s, 1.5Gbit/s, and 3Gbit/s
- 2x SDI outputs
- Versions for LC, ST or SC fiber connections
- Multi-mode version available
- Input range 1260nm to 1620nm (single-mode)
- Input range 780nm to 880nm (multi-mode)
- Supports hot swapping and hot plugging

Description

The ORX 1802 is a compact fiber to 3G-SDI receiver designed to address the restrictions involved with the distribution of uncompressed broadcast quality video signals over long distances.

When paired with a Fiber to 3G-SDI transmitters (e.g. yellobrik OTX 1812) it becomes a cost effective optical transmission / receiver system for 3G-SDI signals up to 1080p60 while preserving full uncompressed quality.

The ORX 1802 provides 2x 3G-SDI outputs and support for LC, ST or SC single-mode fiber connections as well as an LC version suitable for multi-mode fiber. It will auto-detect and re-clock any 270Mbit/s, 1.5Gbit/s and 3Gbit/s SDI fiber source and convert to an electrical signal. The module is fully compatible with 3G Level A and Level B formats. The ORX 1802-2 LC accepts both 1310 nm single-wavelength and CWDM optical input. The ORX 1802-2 MM is compatible with multi-mode fiber input.

Technical Specifications

Fiber Input	1x fiber input Simplex (single-mode) LC/PC, ST/PC, or SC/PC connection or Simplex (multi-mode) LC/PC connection			
	SMPTE 297M - 2006			
	Wavelength:	ORX 1802-2 LC, ST, SC, HS	1260nm to 1620nm	
		ORX 1802-2 MM	780nm to 880nm	
	RX Sensitivity	ORX 1802-2 LC / ST / SC	-18dBm	
		ORX 1802-2 HS	-26dBm	
		ORX 1802-2 MM	-15dBm	
	RX active LED on side of module			
	Max. distance*	ORX 1802-2 LC, ST, SC	max. 10km (6 miles)	@ 3Gbit/s
		ORX 1802-2 HS	max. 80km (50 miles)	@ 3Gbit/s
		ORX 1802-2 MM	max. 300m (1000feet)	@ 3Gbit/s
SDI Output	2x SDI video on 75 Ohm BNC connectors			
	SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI			
	Multi-standard operation from 270Mbit/s to 3Gbit/s			
	Multirate reclocking: 270Mbit/s - 1.5Gbit/s - 3Gbit/s			
	Electrical Return Loss:	to 1.5GHz: >15dB	to 3GHz: >10dB	
Power	+12V DC @ 1.9W nominal - (supports 7 - 24V DC input range)			
	Power LED on side of module			

Ordering Information

Model	Mode	Type	RX Input Range	RX Sensitivity	SFP Included
ORX 1802-2 LC	Single-mode	Standard 1310 & CWDM	1260 - 1580nm	-18dBm	Yes
ORX 1802-2 ST	Single-mode	Standard 1310	1260 - 1580nm	-18dBm	Yes
ORX 1802-2 SC	Single-mode	Standard 1310	1260 - 1580nm	-18dBm	Yes
ORX 1802-2 MM	Multi-mode	SR	840 - 860nm	-15dBm	Yes
ORX 1802-2 HS	Single-mode	Standard 1310 & CWDM	1260 - 1580nm	-26dBm	Yes

Optional Accessories

Rack Frames

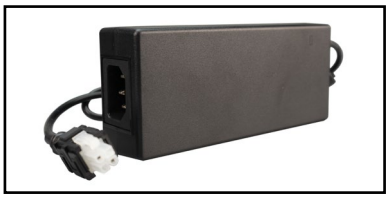
This yellobrik can be placed in a rack frame along others to build increasingly complex systems, all monitored and controlled with a rack controller (RCT 1012) and server module (SRV 1000) via a PC or MAC using LynxCentraal.

The RFR 1200 offers additional power redundancy with GPI alert. It automatically closes a connection between the A and B terminals on power failure.

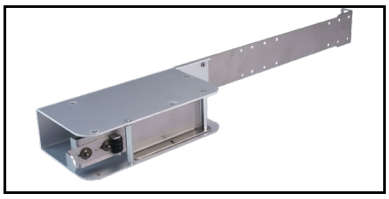
The RPS A100 is a 100W power supply, which can be mounted at the rear end of the RFR 1200 with an RXT 1001 power supply holder for rack frames.



RFR 1200: yellobrik Rack Frame



RPS A100: 100W Power supply



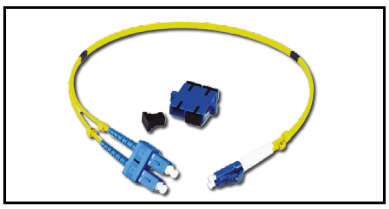
RXT 1001: Power Supply Holder

Fiber Adapter Cables

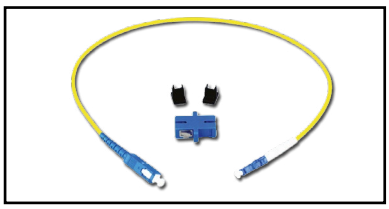
While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

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 individual cable to allow for maximum precision when calculating the optical budget

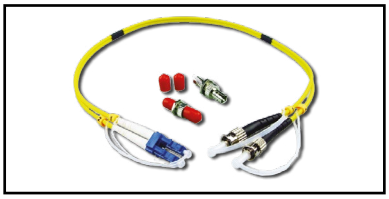
Besides the selection here we offer LC/FC and LC/LC patch cables.



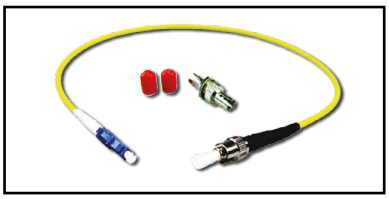
LC/SC Dup: LC/SC Duplex adapter cable



LC/SC Sim: LC/SC Simplex adapter cable



LC/ST Dup: LC/ST Duplex adapter cable



LC/ST Sim: LC/ST Simplex adapter cable