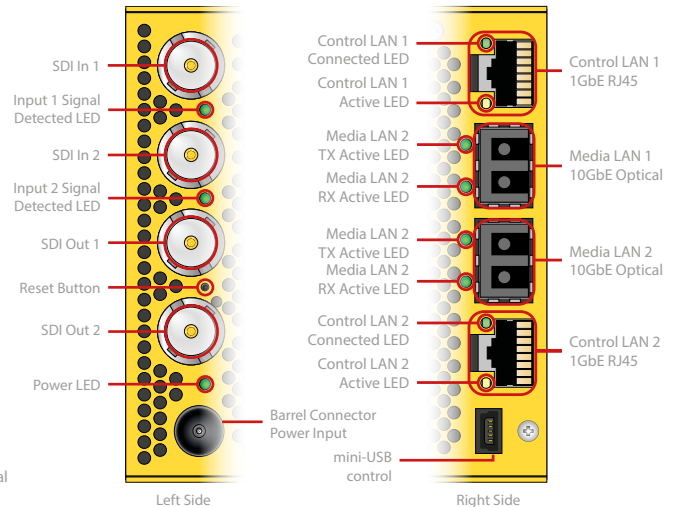
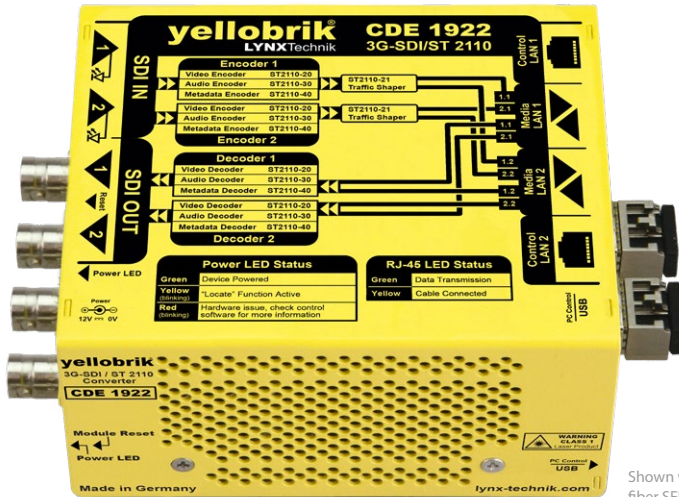


3G-SDI / ST 2110 Bi-Directional Converter

LYNX | Centraal™

yelloGUI



Shown with optional fiber SFP installed

Features

- Full 3G-SDI/1.5G-SDI Support
- Frame synchronizer to align SDI outputs to ST 2059
- Full redundancy for IP links
- NMOS Capability for
 - IS-04 Discovery and Registration Specification
 - IS-05 NMOS Device Connection Management Specification
 - IS-08 Audio Channel Mapping
- Uncompressed Active Video (ST 2110-20)
- SMPTE ST 291-1 Ancillary Data Support
- Seamless Protection Switching ST 2022-7
- 2x 10GbE Media LAN Fiber In-/Output
- 2x 1GbE RJ45 Management LAN
- 3G-SDI Level A and Level B support
- LyncCentraal & yelloGUI compatible

Description

The CDE 1922 is a high performance 3G-SDI to/from IP ST 2110 bridge capable of handling up to four HD video streams simultaneously: 2x 3G-SDI to IP and 2x IP to 3G-SDI.

The converter has 2x ST2110-30 audio encoders and 2x ST2110-30 audio decoders working simultaneously. Each encoder/decoder has a maximum of 8 audio channel (L24, 48kHz, 4 groups). The CDE 1922 can be equipped with a pair of 10GbE Multi-mode, Single-mode or RJ45 SFPs.

The module is suitable for all SMPTE standard signals from 1.5G-SDI to 3G-SDI (SMPTE 292M, 424M) and 10GbE SMPTE 2110.

CAUTION: This is a high-power module. Please ensure adequate airflow is provided when mounting the module in the RFR 1200 rack frame. If necessary, leave empty slots on either side of the module or consider adding an RFF 1200 cooling fan tray to maintain the module within its recommended temperature range.

*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

Video Formats	2K 2048x1080p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60 HD 1920x1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 HD 1920x1080PsF 23.98, 24, 25, 29.97, 30 HD 1920x1080i 50, 59.94, 60 HD 1280x720p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
Color Precision	YCbCr 4:2:2 10-bit
SDI I/O	2x 3G-SDI inputs on BNC connector 2x 3G-SDI outputs on BNC connector
Electrical Return Loss	to 1.5GHz >15dB to 3GHz >10dB
Automatic cable EQ	1.5GbE 200m* 3GbE 150m*
	Belden 1694A
IP I/O	2x 10GbE Media LAN SFP cages (also usable for in-band control) 2x 1GbE RJ45 Control LAN ports
	Compatible Media LAN SFPs: OH-TR-10G-LC-MM 10GbE Duplex Fiber Transceiver SFP Multi-mode 550m* LC OH-TR-10G-LC 10GbE Duplex Fiber Transceiver SFP 20km* LC OH-TR-10G-RJ45 10GbE Ethernet Transceiver SFP 30m* RJ45 OH-TR-10G-XXXX-LC CWDM 1270-1610nm Duplex 10GbE 40km* Transceiver LC
	SMPTE ST 2110-20: Uncompressed Active Video SMPTE ST 2022-7: Seamless Protection Switching SMPTE ST 2110-30: 1-8 Channel PCM Digital Audio SMPTE ST 2110-31: Raw AES Audio SMPTE ST 2110-40: Ancillary Data acc. SMPTE ST 29-1 SMPTE ST 2110-10: RTP System Timing SMPTE ST 2059: Precision Timing
Power	+12V DC @ 16W nominal (incl. 2x SFP) - (7-24V DC input range)
Physical	Size (incl. connectors): 140mm x 90mm x 22mm (4.96" x 3.54" x 0.86") Weight (excl. SFP): 200g (7.05oz)
Ambient	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)
Model #	CDE 1922 EAN# 4250479329348 3G-SDI to ST 2110 Bi-Directional Converter (Module only) CDE 1922 MM EAN# 4250480129821 3G-SDI to ST 2110 Bi-Directional Converter (Includes 2x 10GbE Multi-mode SFPs) CDE 1922 SM EAN# 4250480229835 3G-SDI to ST 2110 Bi-Directional Converter (Includes 2x 10GbE Singlemode SFPs) CDE 1922 RJ45 EAN# 4250480329849 3G-SDI to ST 2110 Bi-Directional Converter (Includes 2x 10GbE RJ45 SFPs)
Includes	Module, AC power supply

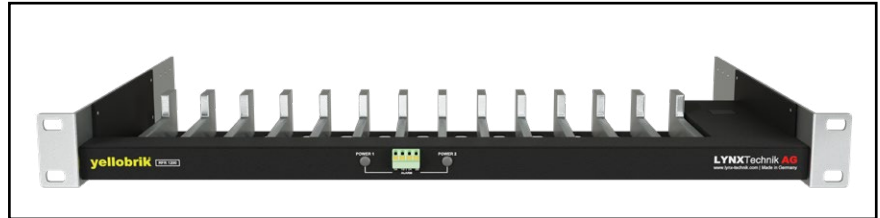
Optional Accessories

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 LynxCentral.

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

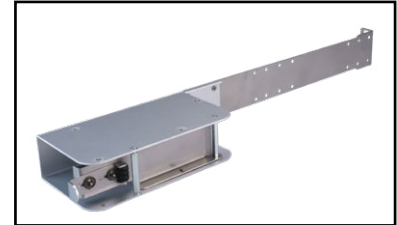
The RPS A100 is a 100W power supply, which can be mounted at the rear end of the RFR 1200 with an RXT 1001 power supply holder for rack frames.



RFR 1200: yellobrik Rack Frame



RPS A100: 100W Power supply



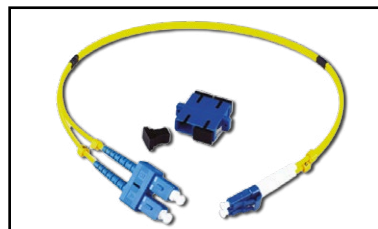
RXT 1001: Power Supply Holder

Fiber Adapter Cables

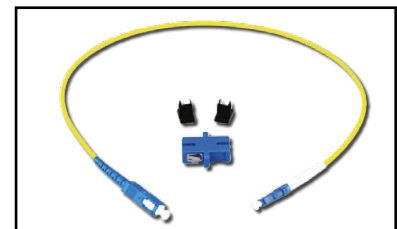
While some of our products offer LC, ST and SC fiber connectors, most SFPs in our product range offer LC fiber connectors.

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 loss and return loss are manually checked for each individual cable to allow for maximum precision when calculating the optical budget

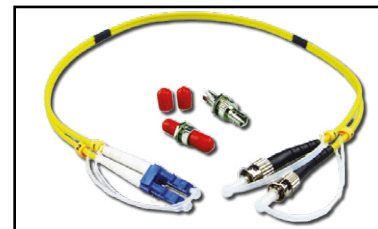
Besides the selection here we offer LC/FC and LC/LC patch cables.



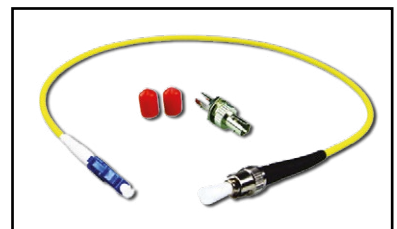
LC/SC Dup: LC/SC Duplex adapter cable



LC/SC Sim: LC/SC Simplex adapter cable



LC/ST Dup: LC/ST Duplex adapter cable



LC/ST Sim: LC/ST Simplex adapter cable

Fiber I/O Options:

A wide range of SFP modules are available for this yellobrik. The selection listed here shows the most likely SFP modules for most typical setups.

More SFP modules are available. To find the perfect solution for your setup visit lynx-technik.com for more information or contact us.

Model	Description	Power	Sense
Optical Ethernet Duplex Fiber Transceiver Options			
OH-TR-10G-LC	10 Gigabit Ethernet Duplex Fiber Transceiver - 10km*	-3 ... 1 dBm	-14,4 dBm
OH-TR-10G-LC-MM	10 Gigabit Ethernet Multimode Duplex Fiber Transceiver - 10km*	-6 ... -1 dBm	-11 dBm
OH-TR-10G-XXXX-LC	10 Gigabit Ethernet CWDM Duplex Fiber Transceiver	0 ... 4 dBm	-23 dBm
Electrical Ethernet Fiber Transceiver Options			
OH-TR-10G-RJ45	10 Gigabit Ethernet Transceiver with RJ45 connector		

*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.