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OSW 1022

2x2 Optical Switch

Features

- Compact 1 slot yellobrik module
- Two optical connection paths: State 1 and State 2
- Non-latching and latching mode
- 2 x GPI for path selections
- 2 x GPO for connection path monitoring
- 4 x dip switches for local control
- 2 x LEDs to display connection path status
- 1 x LED to display power status
- 1 x mini USB for PC control and configuration via yelloGUI
- Singlemode fiber connection with LC connector

Description

The OSW 1022 is an optical 2x2 switch that provides connection paths between two pairs of fiber optic. The compact OSW 1022 switch is suitable for a wide range of applications such as fibre line emergency switchover, route diversity, optical networking system protection, and reconfiguration.

It allows the selection of passive optical paths via GPI control, or local dip switches, or PC/Mac. The GPIs and GPOs provide selection and monitoring of connection paths State 1 & State 2.

It also provides latching and non-latching mode. In the latching mode, the optical switch maintains the current optical connection path (state) and does not change on power failure. In the non-latching mode, the optical switch switches to State 1 connection path upon power failure. When the power is restored, the switch will revert to the   connection path set by the dip switch or to the state set by the GUI.

Technical Specifications

Fiber Optic Cable Type	Singlemode
Fiber Connector	LC/PC
Optical Wavelength	1240 ~ 1640nm
Insertion loss	≤1.0 (Typ 0.4) dB
Return Loss	≥ 50 (Typ 55) dB
Switch Speed	≤1, (Typ 0.5) ms
Repeatability	≤0.002 dB
USB	1x mini USB Type B
GPI	Connector: RJ45 with 2x GPI and 2x GPO

Pin	1	2	3	4	5	6	7	8
GPIO	GPO2A	GPO2B	GND	GPI1	GND	GPI2	GPO1A	GPO1B

Power	+12V DC @ 1 W nominal - (supports 7 - 24VDC input range)
Physical	Size: 108 mm x 90mm x 22mm (4.25" x 3.54" x 0.86") including connectors Weight: 125g (4.4oz)
Ambient	5 - 40ºC (41 - 104ºF) 90% Humidity (non condensing)
Model #	OSW 1022- (EAN# 4250479327443)
Includes	Module, AC power supply

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OSW 1022

Optical Switch Example Application

The Optical switch OSW 1022 provides two connection paths:
State 1 and State 2.
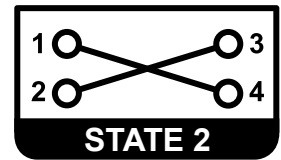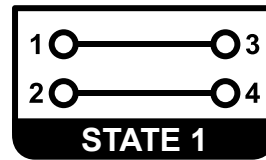
STATE 1

STATE 2

State 1: In this connection path, MUX A is connected to MUX C and MUX B is connected to MUX D.
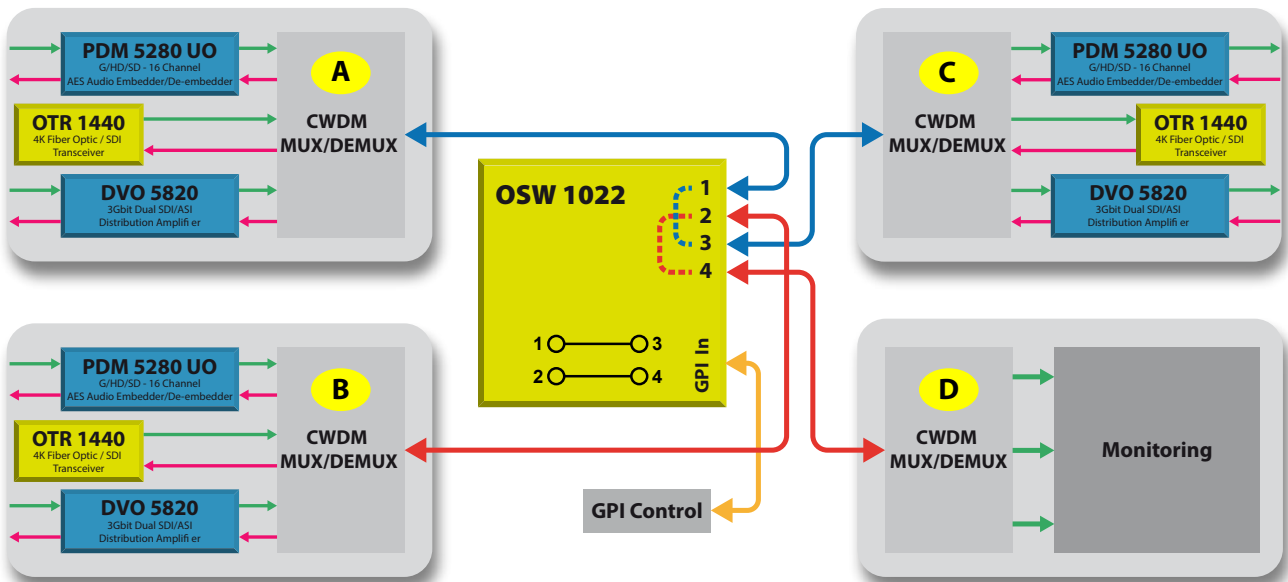
State 2: In this connection path, MUX A is connected to MUX D and MUX B is connected to MUX C.
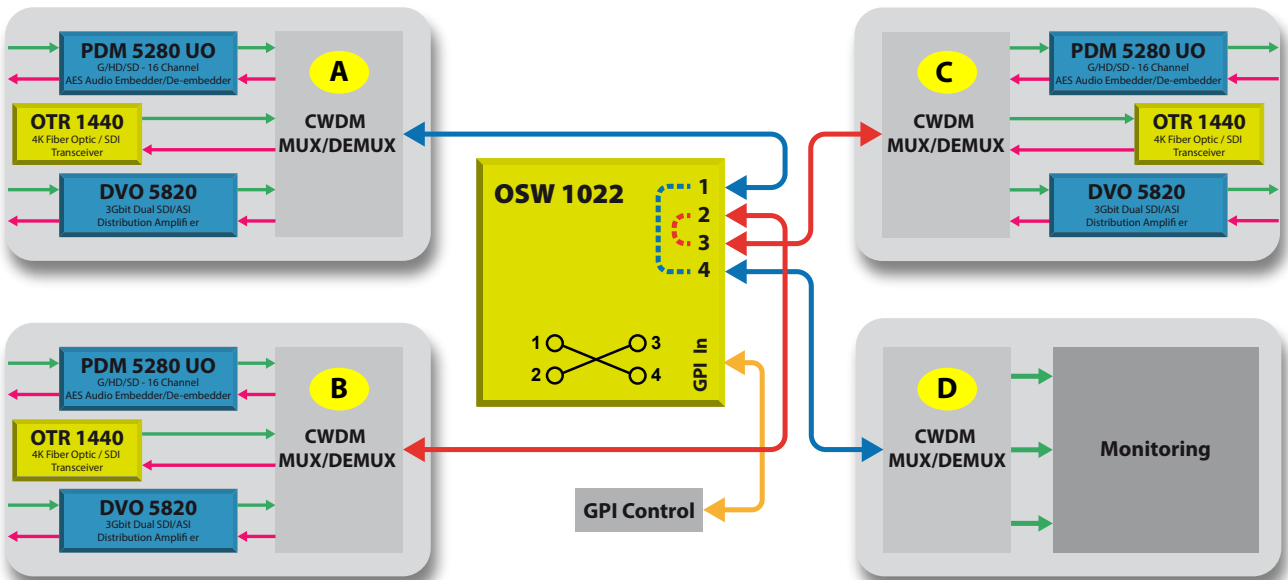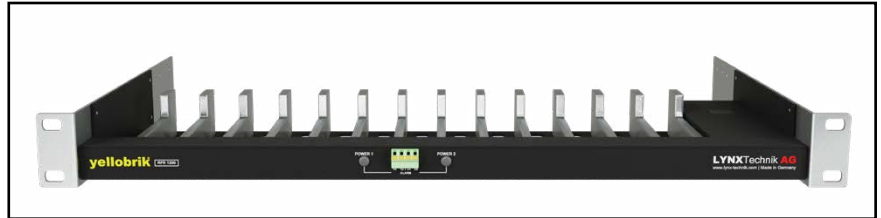
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Optional Accessories

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 1001 power supply holder for rack frames.

RFR 1200: yellobrik Rack Frame

**RPS A100:** 100W Power supply

RXT 1001: Power Supply Holder
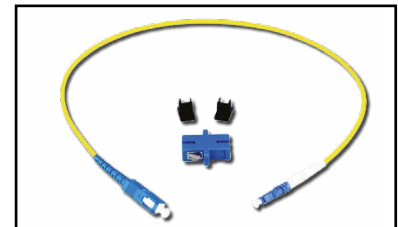
Fiber Adapter Cables

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
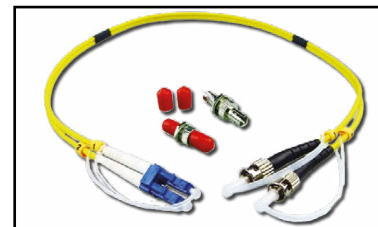
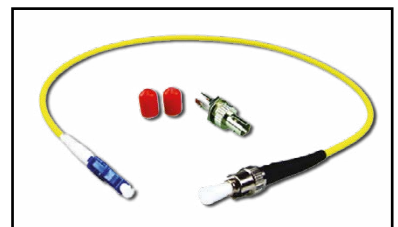Besides the selection here we offer LC/FC and LC/LC patch cables.
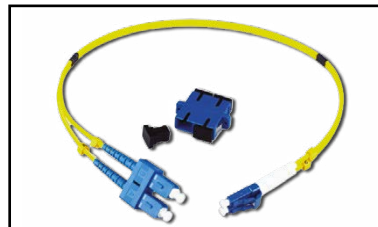
LC/SC Dup: LC/SC Duplex adapter cable

LC/SC Sim: LC/SC Simplex adapter cable

LC/ST Dup: LC/ST Duplex adapter cable

LC/ST Sim: LC/ST Simplex adapter cable

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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