yellobrik® OSW 1022

2x2 Optical Switch

- 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

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.

Rack Frame Options

OPTIONAL rack mount solutions are available.

RFR 1000-1
Rack frame with redundant power supply options.

Power Adapter Options

The kit **INCLUDES** AC power supplies. The power adapters below are optional.

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

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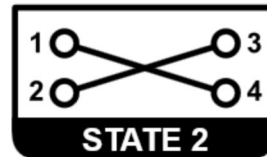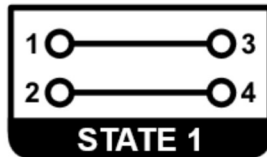Use with a standard 4 pin XLR camera battery power source.

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	+12VDC @ 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 - 40°C (41 - 104°F) 90% Humidity (non condensing)
Model #	OSW 1022- (EAN# 4250479327443)
Includes	Module, AC power supply

Specifications subject to change

yellobrik® OSW 1022
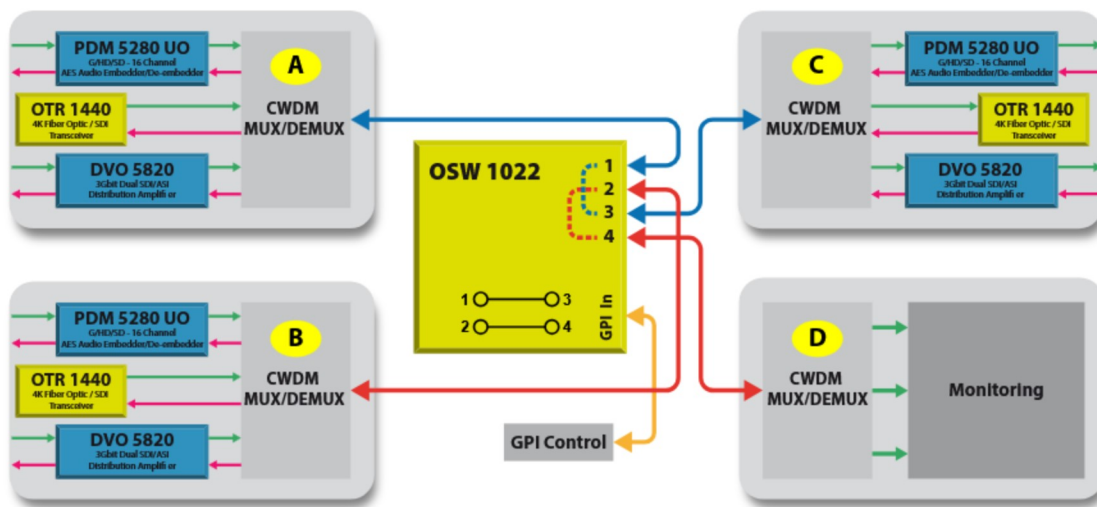
Optical Switch Example Application

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.