OX-2O-2X1-D / OX-2O-2X2

Automatic Protection Switch for all types of optical signals with optional power detection

Data Sheet

Description

The OX-2O-2x1/ OX-2O-2x2 modules are an Optical Fiber Protection switch with 2x1 or 2x2-Bypass switching architecture.

It can be user for fiber redundancy switching, optical switching in fiber networks or protection switching in optical ring networks.

The module can be controlled with external GPI control, or from the miniHUB WEB control interface (RCONmini). In addition it can also perform switching based on power supply failure.

The OX-2O-2X1-D version has an additional optical power sense on both inputs. The user can decide which optical trigger level (dBm) to activate the switch. It will then automatically protect the fiber connection.

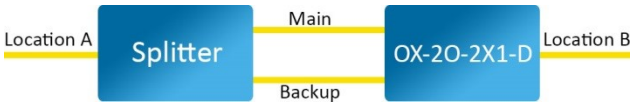
Features

- Available in 2x1 and 2x2-Bypass versions
- GPI control available
- Large Optical detection range, 0dBm to -30dBm (-D verion)
- LEDs show selected input status and input signal presence (-D version)
- Automatic Protection Switching based on optical input power (-D version)
- Switching based on power failure
- Low optical insertion loss of typically < 2dB
- Use together with OS-2-50 to split fiber circuit into 2 fibers

Part Number Options

Part Number	Temperature *)
OX-2O-2X1	0°C to +45°C
OX-2O-2X1-D	0°C to +45°C
OX-2O-2X2	0°C to +45°C

*) Rated temperature for the complete miniHUB.



Absolute Maximum Ratings

Absolute maximum ratings are those values beyond which functional performance is not intended, device reliability is not implied, and damage to the device may occur.

Parameter	Minimum	Maximum	Unit
Storage temperature (non-operating)	-40	+85	°C
Relative Humidity (non-condensing)	5	95	%

General Operating Conditions

Parameter	
Control	10 way DIP switch, GPI, WEB or Automatic(-D version)
LEDs	Card status, selected input. Optical input presence (-D version)
Operating modes	Latching and Non-Latching
Number of inputs	2
Number of outputs	1 or 2
Connectors	LC/UPC

Optical Characteristics

Parameter	Minimum	Typical	Maximum	Unit
Switch versions	2x1 or 2x2-Bypass			
Operating Wavelenth	1270 – 1610			nm
Insertion Loss				dB
OX-2O-2X1		0.8	1.1	dB
OX-2O-2X1-D		1.4	2.1	dB
OX-2O-2X2		0.8	1.1	dB
Max input power			27	dBm
Input power sensor detection range (-D version)	-30		0	dBm
Input power sensor directivity (-D version)	25	30		dB
Return loss	45			dB
PDL		0.05	0.1	dB
Connector	LC/PC			
Transmitting circuit fiber	Single Mode (9/125µm)			

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