

OPERATOR MANUAL

OSD2801

2 Port SFP+ 10G

OEO 3R REPEATER

The OSD2801 is a high performance 10G Optical-Electrical-Optical (OEO) converter (3R Repeater) used for connection between 10Gbps fiber to fiber equipment. The OSD2801 functions as a fiber media converter or as a fiber repeater for long distance transmission. OEO for network backbone (SAN, LAN, MAN) and supports SDH/SONET STM-64/OC-192, 10G fiber channel, 10G Ethernet etc. It normally operates over two fibers but is optionally available for 1 fiber operation (1310nm/1550nm/CWDM/DWDM).

Specifications and Features

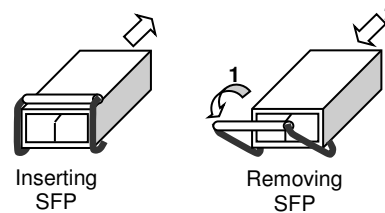
- ▲ Loopback support
- ▲ Supports Jumbo Frame
- ▲ Transparent transport and very low delay
- ▲ Supports ITUT prescribed DWDM/CWDM wavelength
- ▲ 3R Function (Regeneration, Reshaping, Retiming)
- ▲ Hot pluggable
- ▲ Available for singlemode operation over a variety of link budgets
- ▲ Available for operation over 1 or 2 fibers
- ▲ Operates over 0 to +50°C temperature range
- ▲ High performance cooling system (fan cooled when case temperature reaches 50°C)

Fitting SFP Connectors

Care should be taken when inserting/removing the SFP connectors as SFP modules are Electrostatic (ES) sensitive and Electrostatic Discharge (ESD) precautions should be taken when installing. Ensure that the SFP is fully engaged and latched into position.

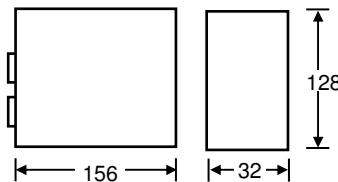
Inserting SFP – Ensure that the SFP lever is in the locked position and insert into SFP port. Gently push the SFP until it locks into place. Remove dust cap and fit fiber cable.

Removing SFP – Remove fiber connector. Pull the SFP lever down to unlock SFP from housing. Using the lever, gently pull the SFP out.



Case Dimensions

Below is an outer case drawing showing the dimensions (mm).



Power Connection

The voltage range of the OSD2801 is 100V_{AC} to 240V_{AC}. Connect power using the supplied IEC power cable to the connector located at the rear of the case.

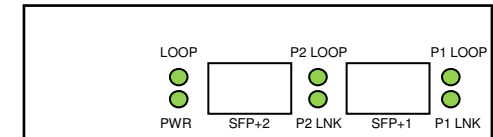
Signal Connection

The appropriate SFP optical modules should be inserted into the SFP port.

The optical fiber cable must be terminated with the appropriate type optical connector (SC for single fiber and LC for 2 fiber). Before connection, inspect the ends of the connectors to ensure that no dust or dirt is present as it could contaminate the modem connector and result in poor performance.

If it is necessary to clean the cable connectors use isopropyl alcohol and lint free tissue to remove contamination.

Port Allocation and LED indicators

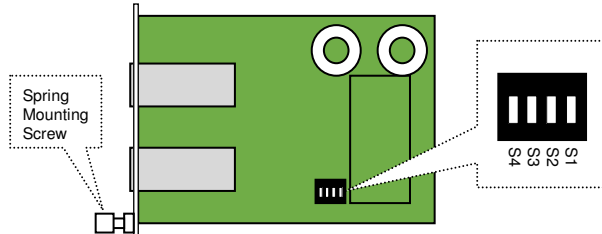


LED Indicators

LED	Colour	Function
P1 Loop	Green	SFP+1 Loopback is on
P1 LNK	Green	SFP+1 Link established
P2 Loop	Green	SFP+2 Loopback is on
P2 LNK	Green	SFP+2 Link established
LOOP	Green	Loopback is on
PWR	Green	Power

Internal Switch Settings

Switches are accessible by carefully unscrewing the spring mounting screw and removing the board from the module housing.



Switch	Speed		
	10.3-11.7G	9.95-11.3G	8.5G
S1	On	Off	Off
S2	Off	Off	On

Switch	Position	Function
S3	On	SFP+1 Loopback is On
	Off	Loopback is Off
S4	On	SFP+2 Loopback is On
	Off	Loopback is Off

Note: *Power to the unit must be off when setting switches*

Technical Specifications

Specification	Performance
Equipment Function	3R Repeater
Transmission Speed	8.5Gbs – 11.7Gbps
Access Type	10G LAN (10.3-11.7G) 10G WAN (9.95-11.3G) Fiber Channel (8.5G)
Interface Type	SFP+ to SFP+
Power Requirements	100V _{AC} to 240V _{AC}
Power Connector	IEC Plug (supplied)
Dimensions (mm)	156W x 128D x 32H
Weight of Module	0.76kg
Operating Temperature	0 to 50°C
Relative Humidity	5 to 90% non-condensing

▲ ELECTROMAGNETIC COMPATIBILITY

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

▲ OPTICAL OUTPUT OPERATION

WARNING: Laser Safety: Class 1 Laser Product per IEC/EN 60825-1:2014 standard.

Warranty/Repairs

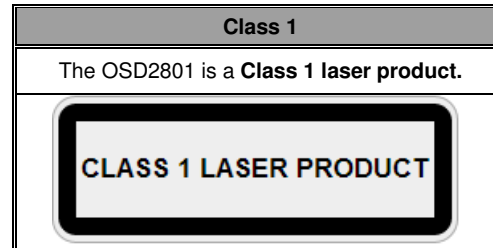
Thank you for purchasing equipment by Optical Systems Design (OSD). OSD warrants that at the time of shipment, its products are free from defects in material and workmanship and conforms to specifications.

For warranty period and repair service please contact your local OSD distributor.



OPTICAL SYSTEMS DESIGN PTY LTD

7/1 Vuko Place, Warriewood 2102.
PO Box 891, Mona Vale,
NSW, Australia 1660.
Phone: +61 2 9913 8540
Fax: +61 2 9913 8735



Precautions

- ▲ All service personnel should be provided training as to the hazards of direct viewing of laser radiation and of the precautionary measures during servicing of equipment
- ▲ Areas where laser products are installed should be restricted in access to trained service personnel only and appropriate warning signs posted in the work area.
- ▲ All laser apertures should be covered by protective covers when not connected to optical fibers. Never leave outputs uncovered.
- ▲ Laser equipment should be positioned above or below eye level where possible. Apertures should be positioned away from personnel
- ▲ Protective eyewear should be worn in the vicinity of laser equipment