OPERATOR MANUAL

OSD2044

10/100Base-Tx to 100Base-Fx

SWITCHING TYPE MEDIA CONVERTER

The OSD2044 is designed to enable connectivity between four 10/100Base-T copper ports and one 100Base-Fx fiber port. The OSD2044 has a built in 4-port switch and allows very economical connection to a backbone from small remote sites as it can often eliminate the need for an external hub or switch in such situations. Operation over at least 100km of singlemode fiber is possible by use of the appropriate optical devices. It normally operates over two fibers but is optionally available for 1 fiber operation. It is equipped with 2 optical connectors, 4 RJ45 and power jack. For ease of network monitoring and fault isolation it has 10 indicators (see tables).

Specifications and Features

- ▲ Complies with the IEEE 802.3 standard.
- ▲ Supports up to 4 copper ports each of which can have network traffic of 10 or 100Mbps.
- ▲ Automatic TP setup: no need for crossover cables
- ▲ Auto-sensing of half or full duplex operation.
- ▲ Automatic setup for 10 or 100Mbps on copper side.

Optical Port LED indicators

❶ Link/Act	❷ Fdx/Hdx	Function
ON	-	Link OK
Blinks in sync with copper port activity LED	-	Link Activity
OFF	-	No optical signal received
-	On	Full Duplex

Copper Port LED indicators

❸ ❺ ❼ ❾ Link/Act	❹ ❻ ❽ ❿ 100Mb/s (Amber)	Function
Off	On	100Mb/s operation. Link Idle
Green Blinks	On	100Mb/s operation. Tx/Rx activity
Amber On	On	100Mb/s connection without auto-negotiation. Link Idle
Amber Blinks	On	100Mb/s connection without auto-negotiation. Rx activity
Amber-Green Alternating	On	100Mb/s connection without auto-negotiation. Tx/Rx activity
Amber On	Off	10Mb/s operation. Link Idle
Amber Blinks	Off	10Mb/s operation. Tx/Rx activity

Port Allocation and LED Indicators
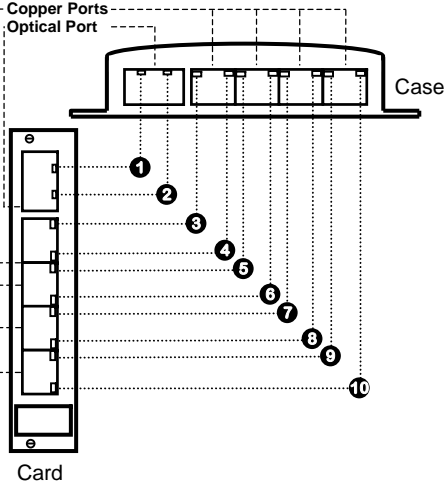
Power Connection

The voltage range of the OSD2044 is $8V_{DC}$ to $35V_{DC}$ or 22 to $28V_{AC}$ @ 4VA. Connect power to the connector located at the back of the case (see diagram). The OSD2044 card version is connected via a DB9 connector supplied by the OSD370 or OSD350 chassis.
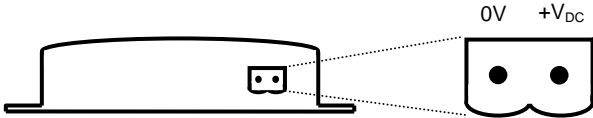
Technical Specifications

Specification	Performance
Data Interface	IEEE802.3 10/100Base-T Ethernet
Data Connector	4 x RJ45
Data Rate	10/100Mbps
Operating Mode	Half or full duplex
Optical Interface	100Base-Fx
Optical interface	ST or SC (SC for single fiber version)
Transmit Wavelength/Power	-15 to –8dBm into singlemode fiber -10 to –2dBm into multimode fiber -19 to –10dBm into multimode fiber (OSD2041LP only)
Receiver Sensitivity	<-33dBm
Optical Link Budget (Std)	> 18dB: >10km on MM fiber @ 1310nm >40km on SM fiber @ 1310nm
Optional Link Budget	>33dB: >100km on SM with 0dBm 1550nm transmitter
Dimensions (mm)	114W x 105D x 32H (module) 25W x 208D x 100H (card)
Weight	0.5kg (module), 0.3kg (card)
Power Requirements	$+8V_{DC}$ to $35V_{DC}$ or 22 to $28V_{AC}$ @ 4VA
Operating Temperature	-20°C to +75°C
Relative Humidity	0 to 95% non-condensing
Chassis Current Consumption (CCC)	0.30 Amp

Warranty/Repairs

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

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