OSD2244 5-PORT REDUNDANT RING GIGABIT ETHERNET SWITCH

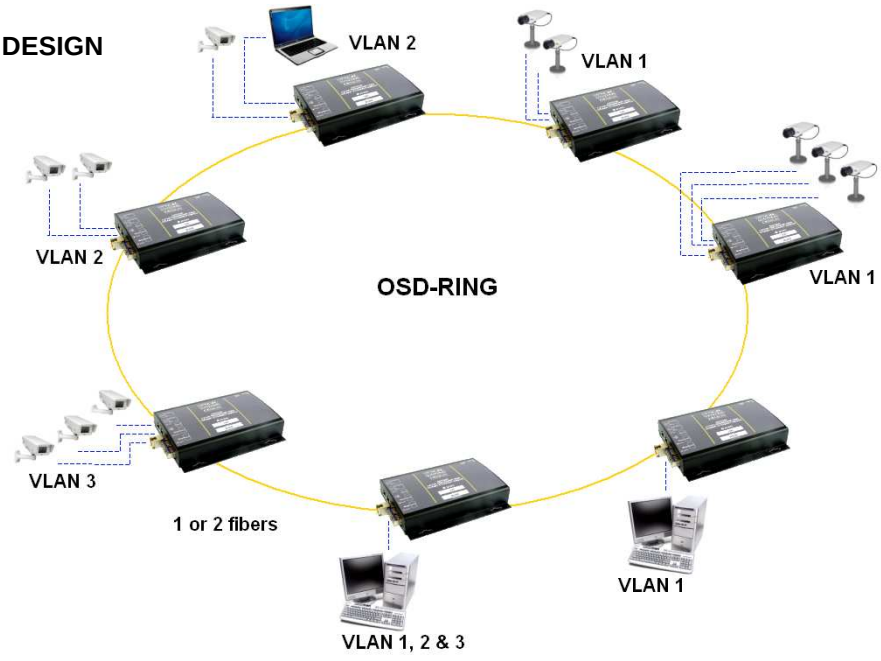
APPLICATIONS

- Any network utilising a mix of copper and fiber
- Industrial IP communications
- Self-healing Gigabit Ethernet backbone networks

FEATURES AND BENEFITS

- Complies with IEEE802.3i/082.3u/802.3ab 10/100/1000Base-T, IEEE802.3u/802.3z 100Base-Fx or 1000Base-LX standards.
- Has a total of five ports: two fixed copper ports for 10/100/1000Base-T, two SFP ports for the fibre ring and one SFP port which may be either copper or fiber.
- A network diameter of hundreds of kilometers is practical
- Ring reconfiguration in the case of cable or modem failures takes less than five milliseconds per hop
- Can be used with either singlemode or multimode fiber over a variety of link budgets
- Available for operation over 1 or 2 fibers.
- Supports network traffic of 1000Mbps.
- Automatic TP setup: no need for crossover cables
- Auto-TP sensing of half or full duplex operation in 10/100 mode.
- Powered by non critical 12VDC supplies
- Operates over the temperature range of -20 to +75ºC
- SFP module sold separately
- Lite Network Management System
- IEEE 802.1Q VLAN Tag with up to 64VIDs
- Dual Power Supply Inputs

TYPICAL SYSTEM DESIGN



ORDERING INFORMATION

OSD2244	Singlemode or multimode 10/100/1000BaseT to1000Base-Lx 5 Port Switch Media Converter
Option C	Standalone module version
Option V	IEEE 802.1Q VLAN Tag enabled with up to 64VIDs
SFP Module	See OSD SFP datasheet #102100002

SPECIFICATIONS

ELECTRICAL

Electrical Data Interface	IEEE802.3ab, IEEE802.3u, IEEE802.3i, Base-T Ethernet at 10, 100 or 1000Mbps
Electrical Data Connector	RJ45 on the two fixed copper ports (Ports 1 and 2) and for SFP modules
NMS Serial Data Interface	RS232
NMS Serial Data Connector	RJ 11
Firmware Upgrade Interface	USB 2.0
Firmware Upgrade Connector	Micro USB
Optical Data Interface	IEEE802.3u, IEEE802.3z, 100Base-Fx or 1000Base-Lx
Optical Connector	LC
SFP Port 3, 4 and 5 Options	100Base-Fx, 1000Base-Lx, 10/100/1000Base-T
Operating Mode	Half or full duplex for 10/100 Full duplex for 1000 Pause frames for flow control

OPTICAL

Transmitter Wavelength	1310 $\pm$ 30nm
Transmit Optical Power	-10 to -4dBm (-5 and +2dBm @ 1310 and 1550nm are optional)
Receiver Sensitivity	<-21dBm
Standard Optical Link Budget	>11dB: >800m on multimode fiber @ 1310nm (Fiber bandwidth limited) >20km on singlemode fiber @ 1310nm >40km on singlemode fiber @ 1550nm
Optional Optical Link Budget	>23dB: >100km on singlemode with optional 1550nm devices
Various SFP Options Possible	Short haul, long haul, single fiber operation, etc. Please consult OSD DATASHEET #1002100002 or contact OSD

NMS

OSD's Lite NMS Supports	Topology Status (Ring or Bus), Port Status (any node in the ring/bus), Float Backup, Optional - IEEE 802.1Q VLAN Tag with up to 64VIDs (Command Line Interface Only)

PHYSICAL

Operating Temperature Range	-20 to +75ºC
Relative Humidity	0 to 95% non-condensing
Power Requirements	+8V to 35V DC or 22 to 28VAC @ 10VA (with 3 SFPs loaded)
Power Connector	6 way terminal block
Indicators	1x Power 2x Copper Speed/Activity/Link on 2x RJ45s 2x Copper Duplex on 2x RJ45s 3x SFP Speed/Activity/Link for copper or fiber 1x Initialise/Ring/Bus 1x Ring port forward/reverse 1x Ring partner 1x Master (by auto-selection)
Dimensions of Module (mm)	114W x 173D x 31H
Weight of Module (kg)	0.5
Dimensions of Card (mm)	25W x 208D x 100H
Weight of Card (kg)	0.3
Chassis Current Consumption (CCC)	0.90 Amp when fully optioned