

**OSD2258P 10-PORT REDUNDANT RING
GIGABIT ETHERNET SWITCH with PoE++ SOURCE**

APPLICATIONS

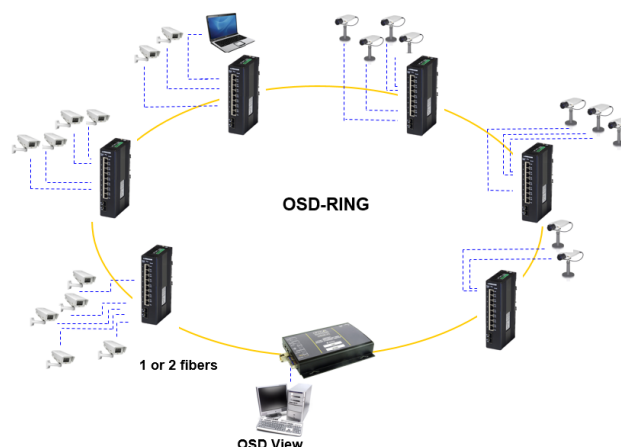
- ▲ Any network utilising a mix of copper and fiber
- ▲ Industrial IP communications
- ▲ Self-healing Gigabit Ethernet backbone networks
- ▲ Networks using Power over Ethernet devices such as cameras, intercoms, access control, telephones, etc



FEATURES AND BENEFITS

- ▲ Complies with IEEE802.3i/802.3u/802.3ab 10/100/1000Base-T, IEEE802.3z 1000Base-Lx/Sx standards
- ▲ Has a total of 10 ports: eight fixed copper ports for 10/100/1000Base-T and two SFP ports for the fiber ring
- ▲ A network diameter of hundreds of kilometers is practical
- ▲ Ring reconfiguration in the case of cable or switch failures takes less than two milliseconds per hop
- ▲ MDI/MDIX Crossover: no need for crossover cables
- ▲ Can be used with 1 or 2 singlemode or multimode fibers over a variety of link budgets
- ▲ Auto-Negotiation for half or full duplex operation
- ▲ Supports 10KB jumbo frames
- ▲ Powered by one or two non-critical 46 to 57VDC supplies, ie redundant power inputs
- ▲ Supports IEEE802.3af/at Alternative A and B cable wiring
- ▲ Provides up to 60W to each RJ45 port with Ports 1 - 4 being single signature and Ports 5 - 8 being dual signature PD detection
- ▲ Remote PoE on/off control and status monitoring
- ▲ Operates over the temperature range of -40 to +75°C
- ▲ OSDWeb Web browser GUI included
- ▲ Compatible with all OSD22XX series of redundant ring Gigabit Ethernet switches
- ▲ DIN rail mounting
- ▲ SFP modules sold separately

TYPICAL SYSTEM DESIGN



ORDERING INFORMATION

OSD2258P	Industrial 10-port Redundant Ring Gigabit Ethernet Switch with up to 60W PoE on each RJ45 port
OSD2258	Non-PoE version of the OSD2258P See separate datasheet 1022258XX
SFP Module	See OSD SFP datasheet #1021000XX



SPECIFICATIONS

ELECTRICAL

Electrical Data Interface	IEEE802.3i/802.3u/802.3ab, 10/100/1000Base-T Ethernet
Electrical Data Rate	10, 100, 1000Mbps with energy detect, auto negotiate, auto MDIX
Optical Data Interface	IEEE802.3z 1000Base-Lx/Sx
Optical Data Rate	1000Mbps
Operating Mode	Half or full duplex for 10/100 Full duplex for 1000 Pause frames for 1000Mbps flow control
Electrical Data Connectors	RJ45
Alarms	Ring to Bus High Temperature
Alarm Interface	Optoisolated MOSFET rated at 100mA @ 46V maximum
PoE Operating Mode PD Detection	IEEE802.3af, IEEE802.3at and IEEE802.3bt Alternative A & B (Pins 1/2+3/6 & 4/5+7/8) Single signature on Ports 1 - 4 (the 4 top ports) Dual signature on Ports 5 - 8 (the bottom 4 ports)

OPTICAL

Optical Port Connectors	SFP
SFP Options	Short haul, long haul, single fiber operation, etc. Please consult OSD datasheet #1021000XX or contact OSD

MANAGEMENT

Standard Interfaces	Command Line Interface (CLI) for OSD Lite Network Management System Web browser based Graphical User Interface (GUI)
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PHYSICAL

Operating Temperature Range	-40 to +75°C
Relative Humidity	0 to 95% non-condensing
Power Requirements	46 to 57VDC @ 5VA maximum (no PoE in use) to 500VA maximum (All 8 ports supplying 60W PoE++ power) >52VDC recommended for PoE+ or ≥55VDC for PoE++ (60W)
Power Connector	8 way 5.08mm terminal block
Alarm Connector	4 way 3.5mm terminal block
Indicators	8x Copper Activity on RJ45s 8x Copper Speed/Link on RJ45s 8x PoE Operation on RJ45s/PoE Power Level/PoE Power Exceeded 2x Activity/Link on SFPs 1x Power 1x Initialise/Ring/Bus
Dimensions of Module (mm)	43W x 91D x 190H
Weight of Module (kg)	0.9