

# OSD2254P 6-PORT REDUNDANT RING GIGABIT ETHERNET SWITCH with SUPERPoE++

### 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

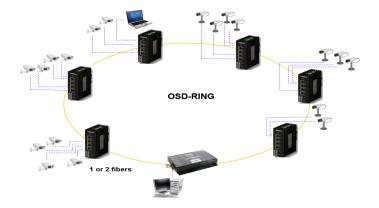
- ▲ Complies with IEEE802.3i/802.3u/802.3ab 10/100/1000Base-T, IEEE802.3u 100Base-Fx, IEEE802.3z 1000Base-Lx/Sx standards
- ▲ Has a total of six ports: four fixed copper ports for 10/100/1000Base-T and two SFP ports for the fibre ring or non-ring (100Base-Fx or 1000Base-X)
- A network diameter of hundreds 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 either 1 or 2 singlemode or multimode fibers over a variety of link budgets
- Available for operation in ring, bus or point to point configurations
- Auto-Negotiation for half or full duplex operation
- Supports IEEE802.3af/at Alternative A and B cable wiring

# **TYPICAL SYSTEM DESIGN**





- Complies with the IEEE 802.3af/at standard including compliant powered device (PD) signature detection and classification
- Provides up to 60W (90W optional) to each RJ45 port. Single and dual signature PD detection with OSD's unique automatic PoE configuration.
- ▲ Remote PoE on/off control and status monitoring
- Supports 10KB jumbo frames
- Powered by either one or two non-critical 46 to 57VDC supplies, ie redundant power inputs
- Operates over the temperature range of -40 to +75°C
- Redundant ring operation is compatible with all OSD22XX series Gigabit Ethernet switches
- DIN rail or surface mounting
- OSDWeb Web browser GUI and OSDview Lite Network Management System are both standard
- ▲ SFP module sold separately



#### **ORDERING INFORMATION**

Industrial 6-port PoE++ Redundant Ring Gigabit Ethernet Switch with 60W per port Industrial 6-port PoE+++ Redundant Ring Gigabit Ethernet Switch with 90W per port Non-PoE version of OSD2254P - See separate OSD2254 datasheet 1022254XX SFP Module See OSD SFP datasheet #1021000XX



SFP

OSD2254P

OSD2254

OSD2254P/90

# **SPECIFICATIONS**

## ELECTRICAL

Electrical Data Interface	IEEE802.3i/802.3u/802.3ab/802.3af/802.3at, 10/100/1000Base-T Ethernet
Electrical Data Rate	10, 100, 1000Mbps with energy detect, auto negotiate, auto MDIX
Jumbo Frame Support	10KB
Optical Data Interface	IEEE802.3z 1000Base-Lx/Sx or IEEE802.3u 100Base-Fx
Optical Data Rate	100Mbps or 1000Mbps user selectable
Operating Mode	Ring or non-ring user selectable Half or full duplex for 10/100 Full duplex for 1000 Flow control
Electrical Data Connectors	RJ45
Alarms	Ring to Bus High Temperature
Alarm Interface	Opto-isolated MOSFET rated at 100mA @ 46V maximum
PoE	IEEE802.3af, IEEE802.3at and PoE++ (PoE+++ optional)
Operating Mode	Alternative A & B (Pins 1/2, 3/6, 4/5, and 7/8)
OPTICAL	
Optical Port Connectors	SFP
SFP Options	Short haul, long haul, single fiber operation, etc. Please consult OSD datasheet #1021000XX or contact OSD
MANAGEMENT	
MANAGEMENT Standard Interfaces	Command Line Interface (CLI) for OSD Lite Network Management System Web browser based Graphical User Interface (GUI) (can be disabled by user)
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Standard Interfaces	
Standard Interfaces PHYSICAL	Web browser based Graphical User Interface (GUI) (can be disabled by user)
Standard Interfaces PHYSICAL Operating Temperature Range	Web browser based Graphical User Interface (GUI) (can be disabled by user) -40 to +75°C
Standard Interfaces PHYSICAL Operating Temperature Range Relative Humidity	<ul> <li>Web browser based Graphical User Interface (GUI) (can be disabled by user)</li> <li>-40 to +75°C</li> <li>0 to 95% non-condensing</li> <li>46 to 57VDC @ 5VA maximum (no PoE in use) to 260VA maximum (All 4 ports supplying 60W PoE++ power) and 390VA maximum for the OSD2254P/90 (All 4 ports supplying 90W PoE+++ power) (attached powered device dependent)</li> </ul>
Standard Interfaces <b>PHYSICAL</b> Operating Temperature Range Relative Humidity Power Requirements	Web browser based Graphical User Interface (GUI) (can be disabled by user) -40 to +75°C 0 to 95% non-condensing 46 to 57VDC @ 5VA maximum (no PoE in use) to 260VA maximum (All 4 ports supplying 60W PoE++ power) and 390VA maximum for the OSD2254P/90 (All 4 ports supplying 90W PoE+++ power) (attached powered device dependent) ≥52VDC recommended for PoE+ or ≥55VDC for 60W/90W PoE
Standard Interfaces PHYSICAL Operating Temperature Range Relative Humidity Power Requirements Power Connector	<ul> <li>Web browser based Graphical User Interface (GUI) (can be disabled by user)</li> <li>-40 to +75°C</li> <li>0 to 95% non-condensing</li> <li>46 to 57VDC @ 5VA maximum (no PoE in use) to 260VA maximum (All 4 ports supplying 60W PoE++ power) and 390VA maximum for the OSD2254P/90 (All 4 ports supplying 90W PoE+++ power) (attached powered device dependent)</li> <li>≥52VDC recommended for PoE+ or ≥55VDC for 60W/90W PoE</li> <li>4 way 5.08mm terminal block</li> </ul>
Standard Interfaces PHYSICAL Operating Temperature Range Relative Humidity Power Requirements Power Connector Alarm Connector	Web browser based Graphical User Interface (GUI) (can be disabled by user)         -40 to +75°C         0 to 95% non-condensing         46 to 57VDC @ 5VA maximum (no PoE in use) to 260VA maximum (All 4 ports supplying 60W PoE++ power) and 390VA maximum for the OSD2254P/90 (All 4 ports supplying 90W PoE+++ power) (attached powered device dependent)         ≥52VDC recommended for PoE+ or ≥55VDC for 60W/90W PoE         4 way 5.08mm terminal block         4 way 3.5mm terminal block         4x       Copper Link on RJ45s         4x       PoE Operation on RJ45s         4x       PoE Operation on RJ45s         2x       SFP Speed/Activity/Link on SFPs         1x       Power/Temperature Alarm

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