

## OSD2251A 4-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
- Networks using 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 four ports: two 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 singlemode or multimode fiber over a variety of link budgets
- Available for operation over 1 or 2 fibers
- Supports 10KB jumbo frames

**TYPICAL SYSTEM DESIGN** 



- Auto-Negotiation for half or full duplex operation
- Powered by non-critical 10 to 36VDC or 24VAC supplies
- Dual power supply inputs
- Operates over the temperature range of -20 to +75°C
- OSDview Lite Network Management System for ring version only
- ▲ Compatible with the OSD2244 and OSD2254 Gigabit Ethernet switches
- SFP modules sold separately
- DIN rail mounting
- Available for operation in ring or point-to-point configuration

# OSD-RING 0 SD-RING 1 or 2 fibers

#### **ORDERING INFORMATION**

OSD2251AIndustrial 4-port Redundant Ring Gigabit Ethernet SwitchOSD2251PPoE version of OSD2251ASFP ModuleSee 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
Jumbo Frame Support	10КВ
Optical Data Interface	IEEE802.3z 1000Base-Lx/Sx, 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 for ring version only	Ring to Bus High Temperature
Alarm Interface	Optoisolated MOSFET rated at 100mA @ 46V maximum
OPTICAL	

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

#### PHYSICAL

Operating Temperature Range	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Power Requirements	+10V to +36V DC or 22 to 28VAC @ 8VA
Power Connector	4 way 5.08mm terminal block
Alarm Connector	4 way 3.5mm terminal block
Indicators	<ul> <li>2x Copper Link on each RJ45</li> <li>2x Copper Activity on each RJ45</li> <li>2x SFP Speed/Activity/Link on each SFP</li> <li>1x Initialise/Ring/Bus</li> <li>1x Power</li> </ul>
Dimensions of Module (mm)	43W x 91D x 110H

Weight of Module (kg)

0.48