

Introduction

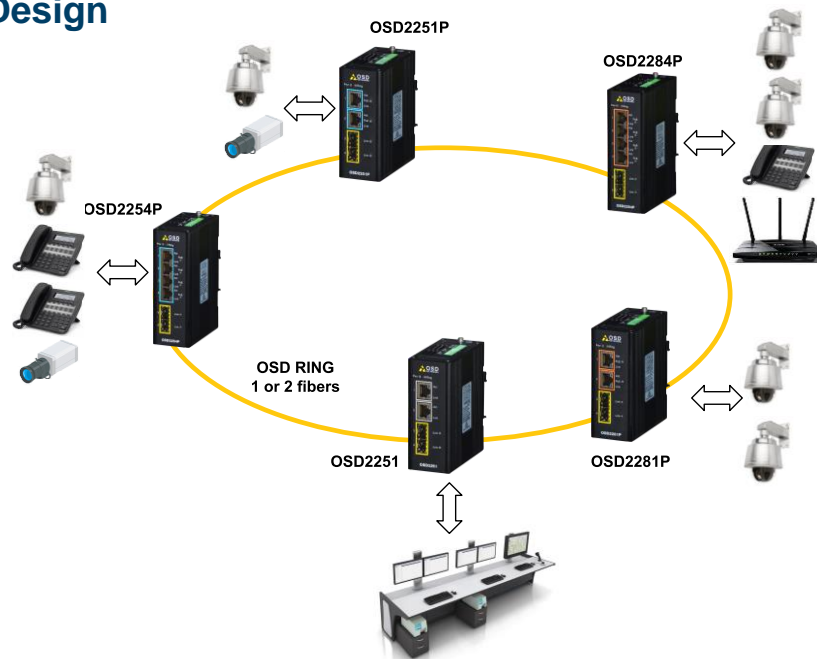
The OSD2284P is a 6-port lite managed industrial ethernet switch with four Gigabit RJ45 ports and two Gigabit SFP uplink ports which can be used as standard LAN ports or as a redundant fiber ring using OSD's proprietary ring protocol. Each RJ45 port can provide up to 90W PoE to power a wide range of devices. Along with higher level features including SNMP, VLAN and IGMP snooping the OSD2284P is suitable for use in critical networks. A rugged IP30 casing, fan-less design and wide operating temperature range from -40 to +75°C make it suitable for use in a wide range of harsh industrial environments.

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)
- ▲ 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
- ▲ Supports IEEE802.3af/at/bt PoE and PoH
- ▲ Provides up to 90W to each RJ45 port with a total power budget of 360W
- ▲ Auto-Negotiation for half or full duplex operation
- ▲ Integrates with third party NMS system via industry standard SNMP v1, v2c, v3
- ▲ Powered by non-critical 46 to 57VDC supplies with dual power supply inputs
- ▲ Supports 10KB jumbo frames
- ▲ Supports VLAN and IGMP v1, v2, v3 snooping
- ▲ Port security guaranteed with MAC binding function
- ▲ Remote PoE on/off control and status monitoring
- ▲ Redundant ring operation is compatible with all OSD225* and OSD228* series Gigabit Ethernet switches
- ▲ Operates over the temperature range of -40 to +75°C
- ▲ DIN rail or wall mounting
- ▲ Available for operation in ring, bus or point-to-point configuration

Typical System Design



Specifications

Hardware

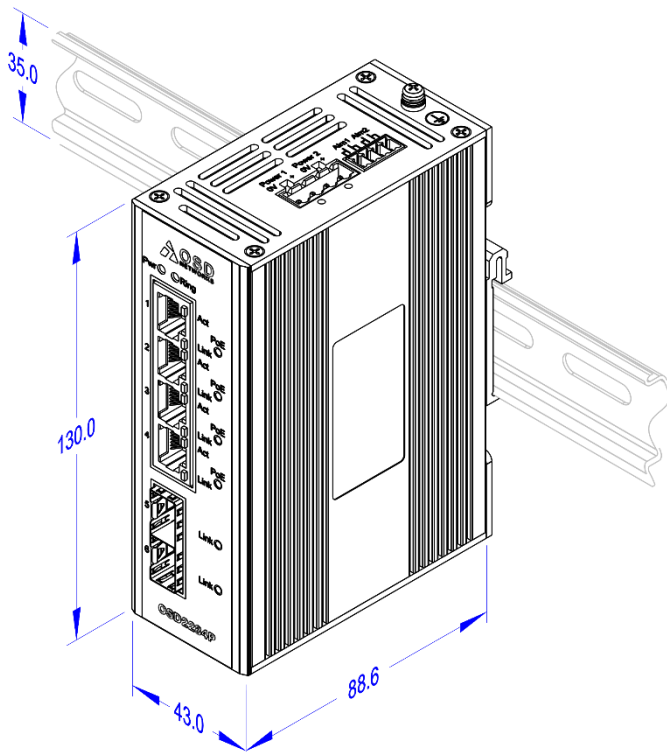
Ethernet	4 x 10/100/1000Base-T RJ45, IEEE802.3i/802.3u/802.3ab
Jumbo Frame Support	10KB
SFP	2 x Gigabit SFP ports (100Mbps or 1000Mbps user selectable)
Optical Data Interface	IEEE802.3z 1000Base-Lx/Sx, IEEE802.3u 100Base-Fx
PoE (user configurable via GUI)	IEEE802.3af/at, IEEE802.3bt, HDBase-T (PoH) Up to 90W per port with total power budget of 360W Additional PoE modes available via Web-GUI
Enclosure Protection Class	IP30
Installation	DIN rail, wall mount or desktop
Alarm (ring version only)	Ring to Bus, High Temperature
Alarm Interface	Opto isolated MOSFET rated at 100mA @ 46V maximum
Alarm Connector	4 way 3.5mm terminal block
DIP Switch	8 way DIP switch for configuration
Power Requirements	46 to 57VDC @ 8VA maximum (no PoE in use) to 376VA maximum (All ports supplying 90W PoE power) (>52VDC recommended for PoE <30W or ≥55VDC for PoE >30W)
Output PoE Vdrop per port	PoE voltage drop per port <0.5V @ 30W, <1V @ 60W
Power Connector	4 way 5.08mm terminal block
Indicators	4 x Copper Link on each RJ45 4 x Copper Activity on each RJ45 4 x PoE Operation for each RJ45 4 x SFP Speed/Activity/Link for each SFP 1 x Initialise/Ring/Bus 1 x Power
Environmental	-40 to +75°C
Relative Humidity	0 to 95% non-condensing
Dimensions	43W x 91D x 130H mm
Weight	680g

Management

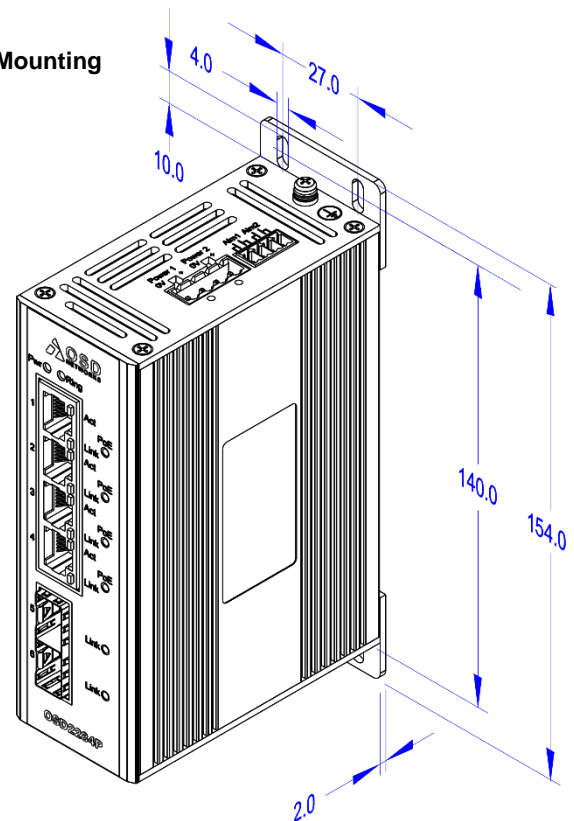
Interfaces	Command Line Interface (CLI) (mini USB) Web browser based Graphical User Interface (GUI) (Chrome or Edge browser) SNMP v1, v2c, v3
Port Configuration	Port enable/disable, Auto negotiation
Port Status	Speed, duplex mode, link status
Port Security	MAC address binding
VLAN	802.1Q VLAN
Multicast Protocol	RFC 2236 IGMP snooping v1, v2, v3
Ethernet Redundancy	OSD-Ring
SNMP MIBs	RFC 1213 MIB Private MIB Framework Contact OSD for full list of available MIB's

Dimensions

Din Rail Mounting



Wall Mounting



Warranty

Warranty Period	5 years
MTBF (Ground Benign Environment, 30°C)	480,000 hours

Ordering Information

Part No.	Description
OSD2284P	Lite managed 4 x 10/100/1000BaseT + 2 x SFP Gigabit Ethernet Switch with up to 90W PoE on each RJ45 port (360W total PoE power budget)
SFP	See OSD SFP datasheets #102100XX and #10210000XX