

### Introduction

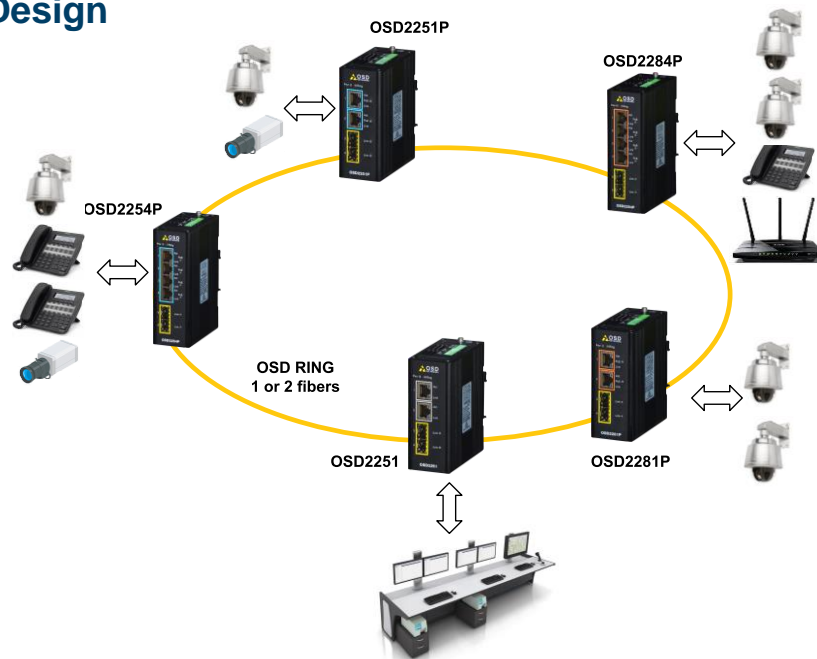
The OSD2284P is a 6-port lite managed industrial ethernet switch with four Gigabit RJ45 ports and two Gigabit SFP uplink ports which can be used as standard LAN ports or as a redundant fiber ring using OSD's proprietary ring protocol. Each RJ45 can provide up to 95W PoE to power a wide range of devices. 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 95W to each RJ45 port with a total power budget of 240W
- ▲ 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 OSD22\*\* 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 95W per port with total power budget of 240W 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 256VA maximum (All ports supplying 60W 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

## Warranty

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

## Ordering Information

Part No.	Description
<b>OSD2284P</b>	Lite managed 4 x 10/100/1000BaseT + 2 x SFP Gigabit Ethernet Switch with up to 95W PoE on each RJ45 port (240W total PoE power budget)
<b>SFP</b>	See OSD SFP datasheets #102100XX and #10210000XX