

Introduction

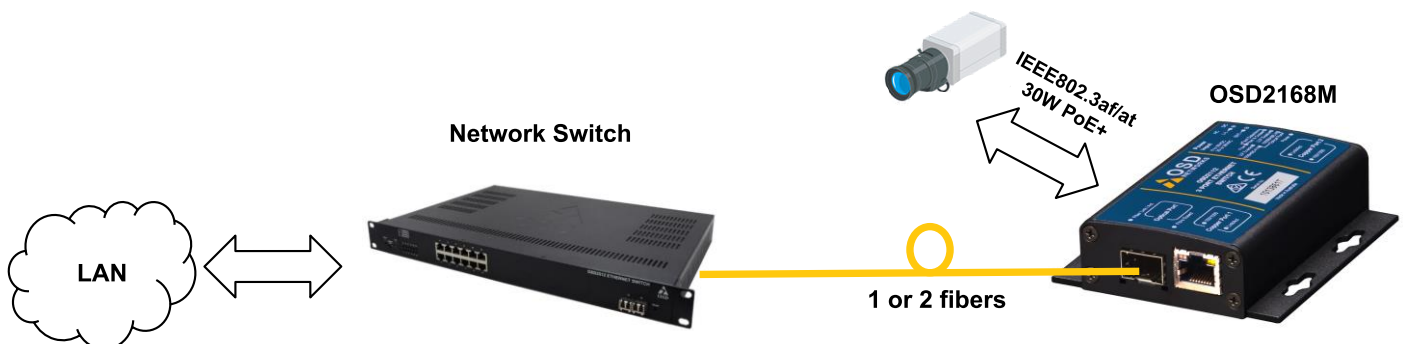
The OSD2168M is a Power over Ethernet Gigabit Media Converter providing one RJ45 port and one optical fiber port which can be either a fixed optical connector port or an SFP port. The RJ45 port provides up to 30W of power and complies with the IEEE802.3af/at specification. With a compact design the OSD2168M can easily be mounted inside a network enclosure or a Smart Pole using the wall mounting holes provided or mounted on a DIN rail using the OSD DRB02 bracket. A rugged IP30 casing, fan-less design and operating temperature range of -10 to +55°C make this product ideally suited for use in a wide range of environments. An extended temperature version (-20 to +75°C) is also available.



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
- ▲ Complies with the IEEE802.3az Energy-Efficient Ethernet standard
- ▲ One fixed 10/100/1000Base-T copper PoE port supplying 30W of power (IEEE802.3af/at)
- ▲ Optical port can be either a fixed optical connector or an SFP port
- ▲ Optical port can be configured to run at either 100Base-Fx or 1000Base-X
- ▲ Auto MDI/MDIX on copper ports (support both straight through and crossover cables)
- ▲ Operates over the temperature range of -10 to +55°C. Extended temperature version (-20 to +75°C) available.
- ▲ Supports Link Loss Forwarding in case of port failure
- ▲ Supports 10KB jumbo frames

Typical System Design



Specifications

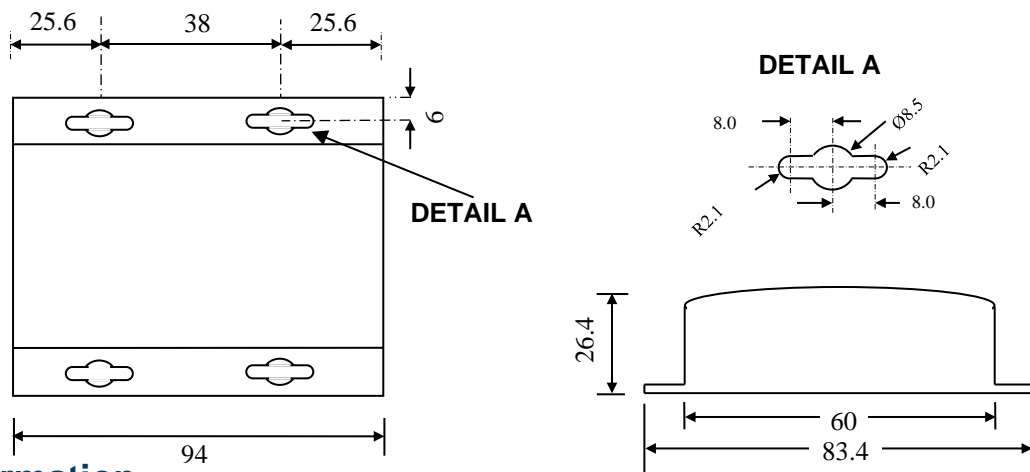
Hardware

Ethernet	10/100/1000Base-T RJ45, IEEE802.3i/802.3u/802.3ab	
Jumbo Frame Support	10KB	
SFP Port	SFP port (100Mbps or 1000Mbps user selectable)	
Fixed Optical Port	Duplex or Simplex fixed connector (SC/PC, ST/PC) Various Optical Link Budgets and Wavelengths available. Contact OSD for options	
Optical Data Interface	IEEE802.3u 100Base-Fx, IEEE802.3z 1000Base-Lx/Sx (Lx for SMOF, Sx for MMOF)	
Enclosure Protection Class	IP30	
Installation	Wall mount or desktop (DIN Rail with addition of DRB02 bracket)	
DIP Switch (3 Way)	1. Optical Port Speed 2. Enable/Disable LLF 3. Port fault detection mode	
Power Requirements	Input Voltage: +46VDC to +57VDC @ 8W + PoE output power for PD devices. (>52VDC recommended for PoE+). Output PoE Voltage: $V_{in} - V_{drop}$	
Output PoE Vdrop	PoE voltage drop <0.5V @ 30W	
Power Connector	Male jack 2.1mm/5.5mm power plugs (Switchcraft S761K or equivalent) 2 way 5.08mm terminal block (Extended temperature version)	
Indicators	1 x Copper Link/Activity on RJ45 1 x Port Speed on RJ45 1 x Power On/Off	1 x Link/Act for SFP 1 x LLF Status
Environmental	-10 to +55°C (Extended temperature version (-20 to +75°C) available)	
Relative Humidity	0 to 95% non-condensing	
Dimensions	83.4W x 94D x 26.4H (mm)	
Weight	280g	

Warranty

Warranty Period	5 years
MTBF (Ground Benign Environment, 30°C)	581,000 hours

Dimensions



Ordering Information

Part No.	Description
OSD2168M/Sx	10/100/1000Base-T to Duplex 1000Base-Sx Media Converter for MMOF (SC connectors)
OSD2168M/Lx	10/100/1000Base-T to Duplex 1000Base-Lx Media Converter for SMOF (SC connectors)
OSD2168M/WLx	10/100/1000Base-T to Simplex 1000Base-WLx Media Converter for SMOF (SC connector)
OSD2168M/SFP	10/100/1000Base-T to Gb SFP Media Converter
Option E	Extended Temperature option, -20 to +75°C
DRB02	DIN Rail mounting bracket for small OSD modules
OSD2000PP/52V/40W	240VAC to 52VDC desktop power supply for use with OSD2168M product family

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