

OM4-PoE

Industrial Ethernet Switch

Two 10/100/1000BASE-T PoE+ ports

Two 100/1000BASE-X optical SFP ports

Applications

IP cameras

IP phones

Wireless access points

Daisy chain topologies



Description

- Industrial hardened Ethernet switch
- Two 10/100/1000BASE-T electrical ports
- Two 100BASE-FX or 1000BASE-X selectable optical SFP ports
- SFP modules support a variety of distance, wavelengths, optical speeds, fiber types.
- LED bar graph shows received optical power making it easy monitor fiber problems.
- PoE or PoE+ capable as per IEEE Std 802.3at-2009.
- Delivers up to 30 Watts per port.
- USB console interface displays status and configuration options.
- Compact rugged metal enclosure for low radiated and conducted emissions.
- Rugged, waterproof external power supply is rated to 70C.
- Surge protection on RJ45 outputs gives added lightning protection.
- Can be DIN rail, wall mounted, or 19" rack mounted with optional hardware.

For non-PoE applications consider Luxcom's OM4-x which has the same form factor but is somewhat less expensive. See www.luxcom.com for details.

Features

- POE or POE+
- Distances up to 100 km
- Surge protection on RJ45s
- Industrial temperature range
- Single or multimode fibers
- Receive optical power meters
- 5 Year warranty
- Plug and play or managed
- Dual media converter mode
- Unidirectional data and port monitoring
- VLAN based port segregation mode
- Link-Pass-Through for link failure monitoring
- Optics can be trunked for greater throughput
- Jumbo packet support

Management Interface

The out of band USB management interface may be used to monitor and configure Ethernet, PoE, and SFP interfaces. The OM4-PoE is shipped as a standard Ethernet switch with PoE enabled so it can be plug and play, or it may manually configured with a host of options.

Specifications¹

SFP Module	802.3 Specification	Laser Light Source	Fiber Size	Optical ² Sensitivity		Optical ³ Range
				Output Min.	Max.	
1000-SX	1000BASE-SX	850 nm	50/125 µm	-9 dBm	-18 dBm	550 m
			62.5/125 µm	-9 dBm	-18 dBm	275 m
1000-LX	1000BASE-LX	1310 nm	50/125 µm	-9 dBm	-20 dBm	1 km
	1000BASE-LX10	1310 nm	62.5/125 µm	-9 dBm	-20 dBm	1 km
			9/125 µm	-9 dBm	-20 dBm	10 km
1000-LXE ⁴	PROPRIETARY	1310 nm	9/125 µm	-3 dBm	-23 dBm	40 km
1000-ZX ^{4,5}	PROPRIETARY	1550 nm	9/125 µm	0 dBm	-23 dBm	80 km
1000-ZXE ^{4,5}	PROPRIETARY	1550 nm	9/125 µm	0 dBm	-32 dBm	100 km
1000-BU ⁶	1000BASE-BX10	1310 nm	9/125 µm	-9 dBm	-20 dBm	20 km
1000-BD ⁶	1000BASE-BX10	1550 nm	9/125 µm	-9 dBm	-20 dBm	20 km
CWDM-1551 ⁷	NA	1551 nm	9/125 µm	-4 dBm	-37 dBm	150 km
CWDM-1571 ⁷	NA	1571 nm	9/125 µm	-4 dBm	-37 dBm	150 km
100-FX	100BASE-FX	1310 nm	50/125 µm	-23 dBm	-32.5 dBm	2 km
			62.5/125 µm	-19 dBm	-32.5 dBm	2 km
100-LX10	100BASE-LX10	1310 nm	9/125 µm	-15 dBm	-25 dBm	15 km
100-LX10E ⁴	PROPRIETARY	1310 nm	9/125 µm	-5 dBm	-35 dBm	60 km
100-BU ⁶	100BASE-BX10	1310 nm	9/125 µm	-14 dBm	-32.5 dBm	20 km
100-BD ⁶	100BASE-BX10	1550 nm	9/125 µm	-14 dBm	-32.5 dBm	20 km

Power consumption (modem only)	4 Watts
PoE power max.	15W/port
PoE+ power max.	30W/port
Operating temperature	-30°C to 70°C
Dimensions	11 x 2.4 x 8 cm

Notes:

- ¹ Specifications are subject to upgrade without notice.
- ² The optical ranges are for typical fibers.
- ³ Proprietary optics must interface with a similar SFP.
- ⁴ Operating temperature range is 0°C to 70°C.
- ⁵ The single-fiber models must be used as complimentary pairs (one BU and one BD).
- ⁶ These optics may be used with a Coarse Wave Division Multiplexer (CWDM)

Ordering Information Modem, Power Supply, Optics are a separate order item.

Modem part number:

OM4-POE

Power supply part number: Specify one of the following.

LTIPS-54-1.12-U-2	for 2 PoE loads, or 1 PoE+ load at 70C	size 13x5x4cm
LTIPS-54-1.67-U-2	for 2 PoE loads, or 2 PoE+ loads at 62C	size 17x6x4cm
LTIPS-54-2.3-U-2	for 2 PoE loads, or 2 PoE+ loads at 70C	size 19x6x4mm

SFP optics part number:

Specify **SFP Module** from the specifications (e.g. 2 pcs 1000-SX).

Accessories part numbers:

DIN-CLIP-1 allows OM4-POE to be snapped to 35mm or G-type DIN rail.

MP05 holds up to three OM4-PoEs, and takes 1U space in a 19" rack.

MB05 The Mounting Base is screwed to a flat surface and holds one OM4-POE

More information on these accessories can be found at www.luxcom.com