

OM1002J

Industrial Ethernet Switch

Two 10/100/1000BASE-T ports

Two 100/1000BASE-X optical SFP ports

Applications

4 port Layer 2 Ethernet switch

Add/Drop topologies

Singlemode to multimode fiber translation

Port monitoring and unidirectional mode



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.
- USB console interface displays status and configuration options.
- Compact rugged metal enclosure for low radiated and conducted emissions.
- Surge protection on RJ45 outputs gives added lightning protection.
- Can be DIN rail, wall mounted, or 19" rack mounted with optional hardware.

Features

- Distances up to 100 km
- Surge protection on RJ45s
- Industrial temperature range
- Single or multimode fibers
- 100 or 1000BASE-X optics
- 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 the Ethernet and SFP interfaces. The OM1002J is shipped as a standard Ethernet switch so it can be plug and play, or it may manually configured with a host of options.

Specifications¹

SFP Module	802.3 Specification	Laser Source	Fiber Size	Optical		Optical ² Range
				Output	Sensitivity	
		nm	µm	dBm min.	dBm max.	km
1000-SX	1000BASE-SX	850	50/125	-9	-18	0.550
			62.5/125	-9	-18	0.275
1000-LX	1000BASE-LX	1310	50/125	-9	-20	1
	1000BASE-LX10	1310	62.5/125	-9	-20	1
			9/125	-9	-20	10
1000-LXE ³	PROPRIETARY	1310	9/125	-3	-23	40
1000-ZX ^{3,4}	PROPRIETARY	1550	9/125	0	-23	80
1000-ZXE ^{3,4}	PROPRIETARY	1550	9/125	0	-32	100
1000-BU ⁵	1000BASE-BX10	1310	9/125	-9	-20	20
1000-BD ⁵	1000BASE-BX10	1550	9/125	-9	-20	20
CWDM-1551 ⁶	NA	1551	9/125	-4	-37	150
CWDM-1571 ⁶	NA	1571	9/125	-4	-37	150
100-FX	100BASE-FX	1310	50/125	-23	-32.5	2
			62.5/125	-19	-32.5	2
100-LX10	100BASE-LX10	1310	9/125	-15	-25	15
100-LX10E ³	PROPRIETARY	1310	9/125	-5	-35	60
100-BU ⁵	100BASE-BX10	1310	9/125	-14	-32.5	20
100-BD ⁵	100BASE-BX10	1550	9/125	-14	-32.5	20

Power consumption	< 3 Watts
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 and SFP optics are separate order items.

Modem part number:

OM1002J

SFP optics part number:

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

Accessories part numbers:

ADAPTER-05 option allows power supply and alarm relay connections on the rear panel.

DIN-CLIP-1 allows OM1002J to be snapped to 35mm or G-type DIN rail.

MB05 mounting base is screwed to a flat surface and holds one OM1002J

MP05 holds up to three OM1002Js, and takes 1U space in a 19" rack.

RMF05 holds up to 16 OM1002Js, and takes a 3U space in a 19" rack

More information can be found in the OM1002J manual at www.luxcom.com