

OM1005

Industrial Ethernet Switch
 Four 10/100/1000BASE-T electrical ports
 One 100/1000BASE-X optical SFP port



Applications

- Secure data environments
- Noisy RFI environments - factory floor
- Rugged environments.

Description

The OM1005 Ethernet switch has four 10/100/1000BASE-T electrical ports and one optical SFP port. The SFP port supports a variety of wavelengths, optical speeds, and fiber types depending on which SFP module is installed. Since both 100BASE-X and 1000BASE-X optics are supported, the optical network may be upgraded to a higher speed at a later time. A signal strength bar graph shows the received optical power. The Ethernet and power connectors are on the front for easy access. A rear dip switch enables manual or auto configuration. The power input accepts 5 to 30 VDC input from an external power cube (supplied). A secondary power supply connection is available on the rear of the case. The OM1005 is enclosed in a rugged metal case for low radiated and conducted emissions. A SPAN software option for port-based VLAN traffic segregation is available.

Features

- 100BASE or 1000BASE Optics
- Single or multimode fiber operation
- Single bidirectional fiber option
- Built in received optical power display
- Distances up to 100 km
- Jumbo packet support
- Power/Link fail alarm relay
- DIN rail and 19" rack mounting options
- Redundant power supply inputs
- Plug and play or forced mode operation
- Industrial range from -40°C to 70°C
- 5 Year warranty

Specifications

Optical¹

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

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4 Port Ethernet Switch
10/100/1000BASE-T and 100/1000BASE-X



Specifications (continued)

Electrical¹

Data I/O levels	IEEE 802.3 compatible
Data I/O connector	RJ45
Power inputs	4.8 to 30V DC
Power consumption	< 4 Watts
Alarm relay Current continuous/peak	125/350 mA
Voltage AC or DC	60V peak

General¹

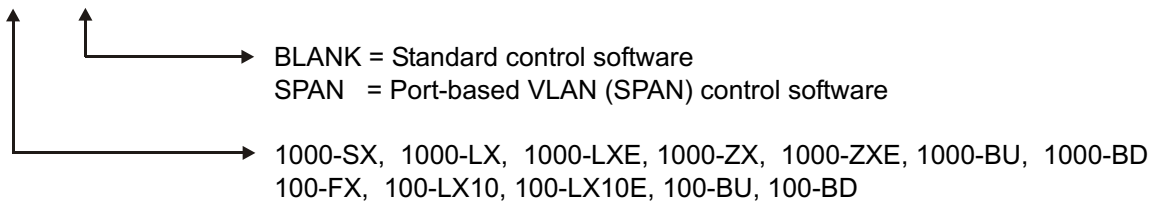
Operating temperature	-40°C to 70°C
Humidity (RH)	10% to 95%
MTBF	> 50,000 hours
Dimensions	11.2 x 2.5 x 8 cm

Notes:

- ¹ Specifications are subject to change without notice.
- ² Proprietary optics have high TX power or non-standard wavelength; therefore they must interface with a similar SFP.
- ³ Operating temperature range is 0°C to 70°C.
- ⁴ The single-fiber models must be used as complimentary pairs (one BU and one BD).

Part Numbers

OM1005 - XX - YY



Individual replacement optics can be ordered by specifying the **XX** option; for example 1000-SX.

See <http://luxcom.com/fiber-optic-ethernet-media-converters.asp> for a list of mounting accessories.

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