

# OM10K-8

64 Gbps Industrial Ethernet Switch  
 Four optical 10G SFP+  
 Four optical 1G SFP  
 Eight electrical 10/100/1000BASE-T

## Applications

- Star or Add/Drop topology
- Secure data environments
- Noisy RFI environments - factory floor
- Airports, pipelines, traffic control



## Description

The OM10K-8 Ethernet switch has eight 10/100/1000BASE-T RJ45 ports, four 1 GE optical SFP ports, and four 1/10 GE SFP+ ports. The SFP ports support a variety of wavelengths and fiber types depending on the SFP installed. The SFP+ ports support 10 GE optical, 1 GE optical, or direct attach copper cables for stacking. Optical signal strength bar graphs display received optical power. The optical ports can be trunked for increased throughput and redundancy. The RJ45 ports can be configured for VLAN and provider bridge traffic isolation. Ethernet and USB console ports are provided for out-of-band management. A USB 2.0 port supports external USB devices such as USB sticks for traffic logging. Management is supported by a high performance, dual-core, ARMv7 CPU. The control software is highly customizable and can support MPLS label and VLAN tag manipulation, and policy-based routing. Two power supply inputs are provided for redundancy; they accept 18 to 58 Vdc from the supplied power cube. The OM10K-8 is enclosed in a rugged metal case for low radiated and conducted emissions. A synchronous Ethernet option is available.

## Features

- 1/10 Gbps SFP/SFP+ optical modules
- Singlemode, multimode, bidirectional fiber
- Built in received optical power displays
- Ethernet OAM
- Distances 20 km for 10GE, 100 km for 1GE
- High performance, ARMv7, dual-core CPU
- Power/Link fail alarm relay
- 19" rack mounting option
- Redundant power inputs
- Linux OS with USB and Ethernet console ports
- Industrial temperature range from -40°C to 70°C
- 5 Year warranty

## Specifications

Optical <sup>1</sup> Code	SFP Module	802.3 Specification	Laser Light Source	Fiber Size	Optical Output	Optical Sensitivity Minimum	Optical Range Maximum
A	1000-SX	1000BASE-SX	850 nm	50/125 μm	-9 dBm	-18 dBm	550 m
B	1000-LX	1000BASE-LX 1000BASE-LX10	1310 nm	62.5/125 μm	-9 dBm	-18 dBm	275 m
				50/125 μm	-9 dBm	-20 dBm	1 km
				62.5/125 μm	-9 dBm	-20 dBm	1 km
C	1000-LXE <sup>2</sup>	PROPRIETARY	1310 nm	9/125 μm	-9 dBm	-20 dBm	10 km
				9/125 μm	-3 dBm	-23 dBm	40 km
D	1000-ZX <sup>2,3</sup>	PROPRIETARY	1550 nm	9/125 μm	0 dBm	-23 dBm	80 km
E	1000-ZXE <sup>2,3</sup>	PROPRIETARY	1550 nm	9/125 μm	0 dBm	-32 dBm	100 km
F	1000-BU <sup>4</sup>	1000BASE-BX10	1310 nm	9/125 μm	-9 dBm	-20 dBm	20 km
G	1000-BD <sup>4</sup>	1000BASE-BX10	1550 nm	9/125 μm	-9 dBm	-20 dBm	20 km
P	10G-ELR	10GBASE-ELR	1310 nm	9/125 μm	-5 dBm	-14.4 dBm	20 km
Q	10G-LR	10GBASE-LR	1310 nm	9/125 μm	-8 dBm	-14.4 dBm	10 km
R	10G-SR	10GBASE-SR	850 nm	OM3	-6 dBm	-11.1 dBm	300 m

# OM10K-8

16-Port, 64 Gbps Ethernet Switch  
Eight 10/100/1000BASE-T, four 1000BASE-X  
and four 10GBASE-LR



## Specifications (continued)

### Electrical<sup>1</sup>

Data I/O levels .....	IEEE 802.3 compatible
Data I/O connector .....	RJ45
Power inputs .....	18 to 58 VDC
Power consumption .....	< 21 Watts
Alarm relay Current continuous/peak .....	125/350 mA
Voltage AC or DC .....	60V peak

### General<sup>1</sup>

Operating temperature .....	-40°C to 70°C <sup>3</sup>
Humidity (RH) .....	10% to 95%
MTBF .....	> 50,000 hours
Weight .....	2 Kg.
Dimensions (W, H, D) .....	24.0 x 4.4 x 25.5 cm

#### Notes:

<sup>1</sup> Specifications are subject to change without notice.

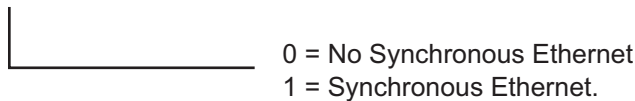
<sup>2</sup> Proprietary optics have high TX power or non-standard wavelength; therefore they must interface with a similar SFP.

<sup>3</sup> Operating temperature range is 0°C to 70°C for 1000-ZX and 1000-ZXE optics.

<sup>4</sup> The single-fiber models must be used as complimentary pairs (one BU and one BD).

## Part Numbers

### OM10K-8-X



A 110-240Vac input, 24Vdc output desk top supply comes with the base unit.

Optics are ordered separately by specifying the quantity and type of SFP module; for example 1000-SX.

## Accessories

Extra power cube for redundancy (100-240 V AC, 50-60 Hz input, 24 V DC output) . . . . . **LTIPS-24-2.5-U**

Mounting rack (1U holds 1 OM10K-8, includes brackets and hardware) . . . . . **MB-CH4**

More information on these accessories can be found at [www.luxcom.com](http://www.luxcom.com).