



# Canobeam Free Space Optics Model MFSO-130-Type SFP



### Features and Benefits

The MFSO-130 Canobeam Free Space Optics unit incorporates real-time beam auto tracking, providing high availability point-to-point wireless connectivity for all market segments including broadcast, education, government and enterprise users globally.

As part of the Molex total structured cabling solution, Canobeam is ideal for campus and building-to-building connectivity as either a primary or backup backbone link. The robust Canobeam can be installed outside or in a window for point-to-point applications.

- As with Fiber Optic Cable, it is Protocol Independent and supports transmission speeds of 1.25 Gbps
- Reliable transmission distances of 100 to 1000 meters
- Real time auto tracking function maintains beam alignment compensating for changes in the installation due to environmental factors
- 3R function (re-shaping, re-timing & re-generating)
- Requires no radio frequency allocations, permits or licenses
- Highly secure data links
- Economical installation and operating costs
- SNMP Management available

### Commercial Standards

North American

Electrical: UL60950/CSA60950

Laser Safety: 21 CFR1040, FDA Laser Notice No. 50

EMC: FCC-Part 15 (ICES-003)

European

Electrical: EN60950

Laser Safety: IEC60825-1, IEC60825-2

EMC: EN55022, EN55024

### Applications

Molex Free Space Optics solutions are designed to support high speed applications including:

IEEE 802.3 100Base-FX

IEEE 802.3 10Base-F 10 Mbps

### Technical Information

#### Mechanical Characteristics

Dimensions: 235mm (W) x 158mm (H) x 503mm (D)

Weight Approximately: 8 Kg (17.2 Lbs.)

Parameter	Specification
Standard Transmission Distance*	100 - 1000 meters
Data Transmission Speed	1.25 Gbps
Transmission Device	Laser Diode
Laser Wavelength	785 +/- 15nm
Laser Output Power	Approximately 11mW
Safety Class of Laser	Class1M
Receiving Device	Si APD
Propagation Delay @1000 meters	3.3µ microseconds
Propagation Delay @2000 meters	6.6µ microseconds
Auto Tracking Adjustment	Yes (Horizontal: ±1.2°, Vertical: ±1.2°)
3R Function	Yes
Media Interface	SFP SLOT x1
Operating Temperature Range	-20°C ~ +50°C
Power	AC 100-240V 50/60Hz DC -48V optional
Power Consumption	Approximately 20W
Installation Environment	Indoor or Outdoor (Weatherproof: IP56)

\* Longer transmission distances can be achieved but this is a function of weather conditions and acceptable link availability.

### Atmospheric Attenuation Chart

Weather Conditions	Light Haze	Thin Fog	Light Fog
Precipitation	light rain/snow @ 2.5mm/hr	Heavy rain/snow @ 25mm/hr	cloudburst/snow @ 100mm/hr
Attenuation/km	3dB	10dB	30dB
Visibility/meters	4333	1300	433
MFSO-130 transmission distance	3650	1720	780

## ORDERING INFORMATION

Order No.	SAP No.	Description
MFSO-130-Type SFP	180600110	Canobeam MFSO-130-Type SFP

\*Plug in SFP modules can be purchased separately. Contact Molex for recommended modules

## MOLEX PREMISE NETWORKS

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