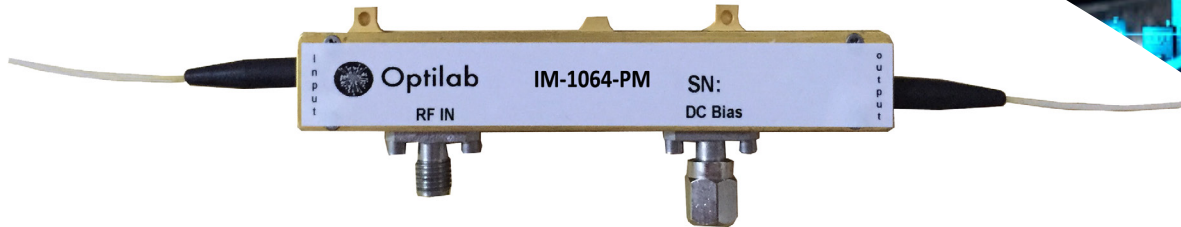


IM-1064-PM



1064 nm Intensity Modulator w/ PM input/output

The Optilab IM-1064-PM is a 20 GHz Intensity Modulator that is manufactured with both PM (Polarization Maintaining) fiber on input/output port. The modulator incorporates a zero-chirp design for ultra long haul transmission. Covering full C-band and L-band, it can be used for any DWDM channel. With exceptional E/O bandwidth and highly linear transfer function, it can also be utilized for digital transmission to 20 Gb/s or analog RFoF transmission to 20 GHz pulse generation. The applications include PM optical system, mode-locked fiber laser and microwave optical link. This modulator operates with low drive voltage, making it compatible with a wide variety of modulator drivers. A separate bias port allows the modulator to operate at optimal points of transfer function. Supplied in a hermetic package, qualified to Telcordia™ GR-468-CORE, this product assures high reliability and performance at all times. Contact Optilab for more information.

Features

- PM input and output port
- Low Drive Voltage
- 1030 nm to 1090 nm operating wavelength
- Zero chirp design
- Low insertion loss
- Useful bandwidth up to 20 GHz
- High Extinction Ratio
- Temperature Range of 0 °C to 70 °C
- 3 year warranty standard

Applications

- OC192 C-band & L-band
- TDM and WDM up to 15 Gb/s
- Analog Transmission up to 12 GHz
- Satellite Link
- Antenna Remote
- RF over Fiber
- Pulse Generation

Functional Diagram



1064 nm Intensity Modulator w/ PM input/output

OPTIONS

IM-1064-PM-x

x a, FC/APC;
u, FC/UPC

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.



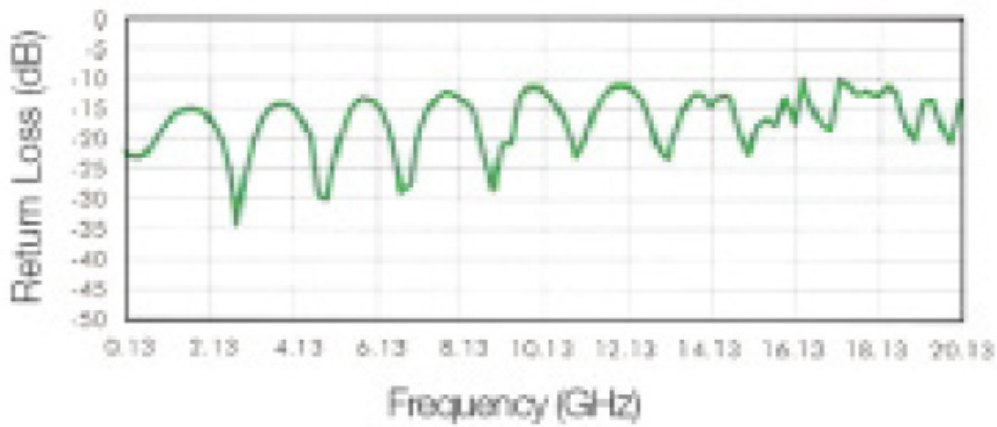
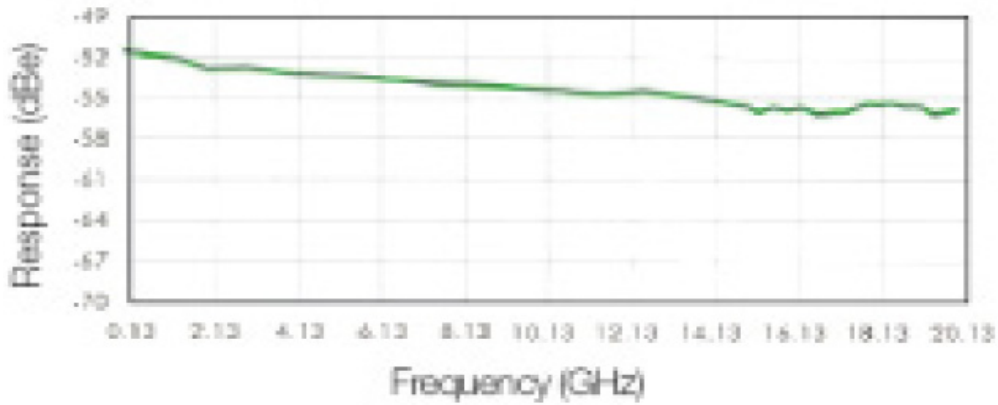
Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

General Specifications	
Input optical power	70 mW typ., 100 mW max.
Operating wavelength	1030 nm to 1090 nm
Chirp Value α	< 0.2 (zero chirp design)
Insertion Loss	4 dB typ., 4.5 dB max.
Extinction Ratio	≥ 30 dB typ. @ DC
Optical return loss	≤ -45 dB max.
PRBS Electrical drive voltage	5.0 Vpp typ. @ 1 GHz
S21 3 dB Bandwidth (RF Port)	10 GHz min., 12 GHz typ.
S11 Return Loss (RF Port)	≤ 11 dB min up to 9 GHz
V_{π} (RF Port)	≤ 6.1 V @ 10 Gb/s
RF Input power	26 dBm
Impedance (RF Port)	50 Ω typ.
S21 Bandwidth (Bias Port)	200 MHz min.
V_{π} (Bias Port)	≤ 10 V @ DC
Impedance (Bias Port)	100 k Ω min.
Mechanical Specifications	
Operating Temperature	0 °C to +70 °C
Storing Temperature	-40 °C to +80 °C
Operating Humidity	0% to 90% Relative Humidity
Input Fiber Type	PANDA - PM
Output Fiber Type	PANDA - PM
Input Connector	PM FC/APC, PM FC/UPC
Output Connector	PM FC/APC, FC/UPC
Material	LiNbO3
Crystal Orientation	X-cut, γ -propagating
Waveguide Process	Ti-indiffused
Bias Port Connector	2 Pins
RF Port connectors	Anritsu K
Cabling	900 μ m tubing
Dimensions	66 mm x 22 mm x 9 mm

1064 nm Intensity Modulator w/ PM input/output

Typical S21 and S11 Bandwidth



Mechanical Drawing

