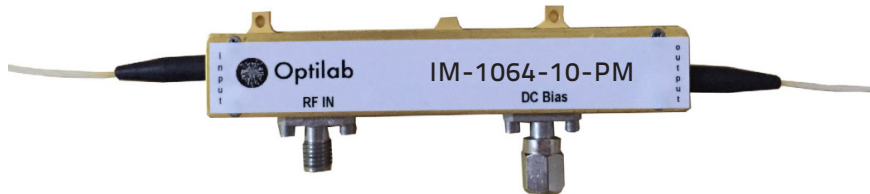


IM-1064-10-PM



1064 nm, 10 GHz Bandwidth Intensity Modulator

The Optilab IM-1064-10-PM Intensity Modulator is designed for external modulation of 1064 nm laser; up to 10 GHz or 12.5 Gb/s. It is also applicable for pulse generation for Ytterbium-Doped Fiber Amplifier amplification (YDFA) in satellite links and active mode locked laser applications. It is a bias-stabilized lithium modulator that proves to be extremely stable for long periods of time, and features excellent stability in a biased circuit, operating from 1030 nm to 1090 nm. It has an excellent operating temperature tolerance ranging from -30°C to $+75^{\circ}\text{C}$. The IM-1064-10-PM uses a Polarization Maintaining (PM) input and output fiber, featuring separate RF and bias ports. Contact Optilab for more information.

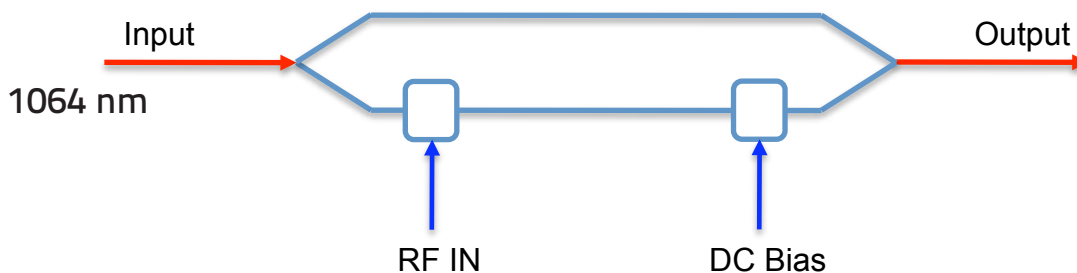
Features

- 1030 - 1090 nm wavelength
- Low Drive Voltage
- 3 dB bandwidth up to 10 GHz
- PM input and output
- High extinction ratio

Applications

- Pulse generation fo YDFA
- Up to 12.5 Gb/s
- Satellite Link
- Active mode locked laser
- Research and development

Functional Diagram



1064 nm, 10 GHz Bandwidth Intensity Modulator

OPTIONS

IM-1064-10-PM-x

x Connector Type:
a, FC/APC;

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.



Optilab Advantage

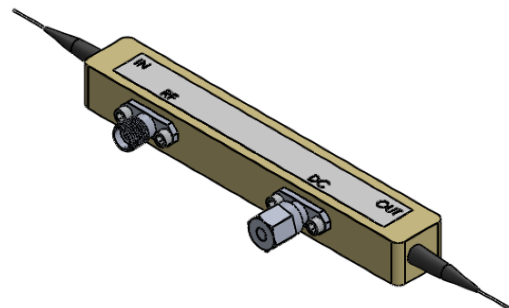
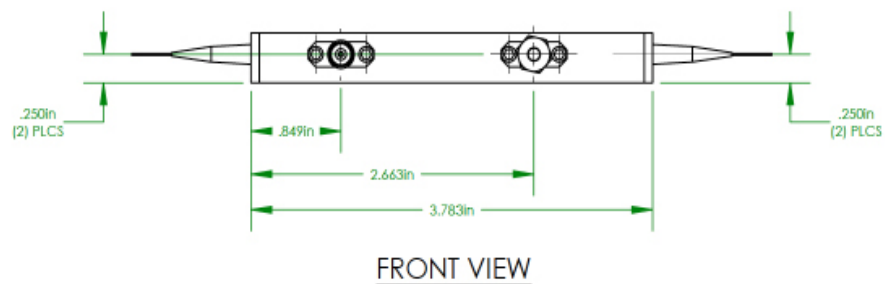
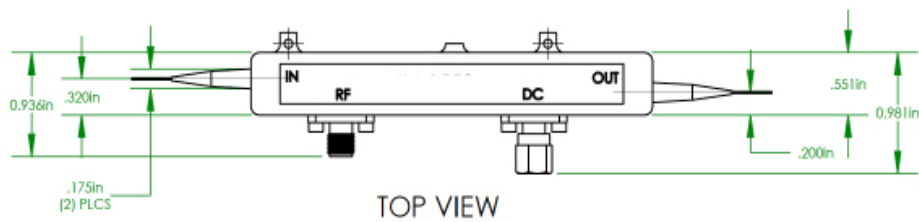
- Innovation
- Performance
- Quality
- Customization
- Warranty

General Specifications	
Input optical power	100 mW max.
Operating wavelength	1030 to 1090 nm
Chirp Value	<± 0.2
Insertion Loss	5.0 dB max., 4.5 dB typ.
Extinction Ratio	25 dB min.
Optical return loss	45 dB min.
S21 Bandwidth	8 GHz min., 10 GHz min.
S11 Return Loss	≤ 10 dB @ 10 GHz
V π (RF Port)	≤ 4.0 V typ. @ DC
RF Input power	26 dBm max.
Impedance (RF Port)	50 ± 5 Ω
S21 Bandwidth (Bias Port)	500 MHz typ.
V π (Bias Port)	3 V typ.
Impedance (Bias Port)	>1 M Ω
Rise Time / Full Time	<40 ps

Mechanical Specifications	
Operating Temperature	Standard range: -30 °C to +75 °C
Storing Temperature	-60 °C to +85 °C
Operating Humidity	0% to 90% Relative Humidity
Input Fiber Type	PM 980 - 900 micron loose tube
Output Fiber Type	PM 980 - 900 micron loose tube
Input Connector	FC/APC (PM)
Output Connector	FC/APC (PM)
Material	LiNbO3
Crystal Orientation	X-cut, y-propagating
RF Port Connector	Wiltron K-Type female
Bias Port connectors	SMA female
Cabling	900 μ m tubing
Dimensions	3.783" x 0.981" x 0.640"

1064 nm, 10 GHz Bandwidth Intensity Modulator

Mechanical Drawing



* Dimension unit: inch