



## 1064 nm, 500 mW Fiber Isolators (SM)



### Specifications

- **Wavelength:** 1064 ± 20/-4 nm
- **Power:** 500 mW
- **Isolation:**\* ≥ 33 dB @ 1064 nm
- **Insertion Loss:** 1.4-2.0 dB
- **PDL:** ≤ 0.15 dB
- **Return Loss:** > 50 dB
- **Fiber:** HI1060

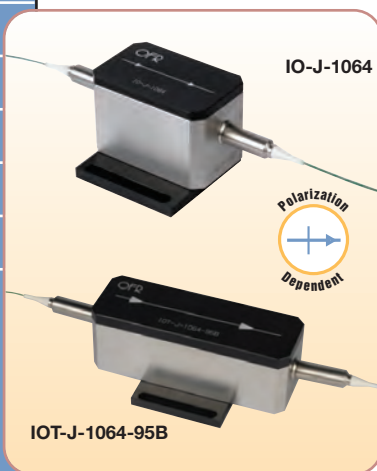
\*Isolation is both wavelength and temperature dependent (not for use with pulsed applications)

The IO-H-1064 and IO-H-1064APC narrowband, polarization-independent fiber isolators are designed for use in the 1060 to 1084 nm range. Single mode fiber is used on the input and output. IO-H-1064 has cleaved endfaces while IO-H-1064APC has FC/APC connectors on both ends.

To reduce package size, Bismuth Iron Garnet (BIG) film is used as the Faraday rotating material since it has a very high Verdet constant and is relatively inexpensive. However, absorption increases rapidly at wavelengths shorter than 1060 nm.

ITEM#	\$	£	€	RMB	CONNECTORS	DESCRIPTION
IO-H-1064	\$ 1,450.00	£ 1,005.00	€ 1,287.50	¥ 12,244.00	Cleaved	Low-Power, SM Fiber Isolator, 1064 nm
IO-H-1064APC	\$ 1,490.00	£ 1,033.00	€ 1,323.00	¥ 12,582.00	FC/APC	Low-Power, SM Fiber Isolator, 1064 nm

## 1064 nm, 3 W Polarization-Dependent Fiber Isolators (PM)



ITEM#	IO-J-1064	IOT-J-1064-95B
Wavelength	1064 ± 10 nm	1064 ± 4 nm
Max Power	3 W (CW)	3 W (CW)
Isolation <sup>a</sup>	32 - 38 dB	42 - 47 dB
Insertion Loss <sup>b</sup>	0.6 - 1.3 dB	1.0 - 1.7 dB
Extinction Ratio	>20 dB	>20 dB
Return Loss	>50 dB	>50 dB
Fiber <sup>c</sup>	PM 980/1064	PM 980/1064

<sup>a</sup>Not for use with pulsed applications or feedback.  
<sup>b</sup>Device aligned for transmission along the slow axis; light launched into the fast axis is not transmitted  
<sup>c</sup>PM fiber 400 μm buffer with loose Hytrel tubing

The IO-J-1064, IO-J-1064APC, and IOT-J-1064-95B low-power polarization-dependent fiber isolators, which utilize PM fiber on both the input and output of the isolator, are designed for CW applications up to 3 W. The device is aligned for transmission along the slow axis of the fiber. Any signal not aligned with the input slow axis will be blocked. In the reverse direction, light with any state of polarization will be isolated.

The IO-J-1064 and IO-J-1064APC fiber isolators, which are designed to provide 32 to 38 dB of isolation in the 1054 to 1074 nm range, have cleaved and FC/APC-terminated fiber endfaces, respectively. The IOT-J-1064-95B is a double-stage PM fiber isolator; it combines two isolators into a single fiber assembly, resulting in improved isolation.

ITEM#	\$	£	€	RMB	CONNECTORS	DESCRIPTION
IO-J-1064	\$ 1,935.00	£ 1,341.50	€ 1,718.00	¥ 16,340.00	Cleaved	Low-Power, PM Fiber Isolator, 1064 nm
IO-J-1064APC	\$ 2,035.00	£ 1,410.50	€ 1,806.50	¥ 17,184.00	FC/APC	Low-Power, PM Fiber Isolator, 1064 nm
IOT-J-1064-95B	\$ 2,650.00	£ 1,837.00	€ 2,352.50	¥ 22,377.00	Cleaved	Low-Power, PM Fiber Isolator, 1064 nm

## 1064 nm, 3 W Polarization-Independent Fiber Isolators (SM)



### Specifications

- **Wavelength:** 1064 ± 10 nm
- **Power:** 3 W CW (Max)
- **Isolation:**\* 33-38 dB
- **Insertion Loss:** 0.7-1.3 dB
- **PDL:** ≤ 0.15 dB
- **Return Loss:** > 50 dB
- **Fiber:** HI1060

\*Isolation is both wavelength and temperature dependent (not for use in pulsed laser applications)

The IO-F-1064 and IO-F-1064APC narrowband, polarization-independent fiber isolators are designed for use in the 1054 to 1074 nm range. Single mode fiber is used on the input and output. IO-F-1064 has cleaved endfaces while IO-F-1064APC has FC/APC connectors on both ends.

These fiber isolators utilize a TGG rotator so that they can be used with higher powers (3 W compared to 0.5 W) and at lower wavelengths (1054 nm instead of 1060 nm) than their BIG film rotator counterparts.

ITEM#	\$	£	€	RMB	CONNECTORS	DESCRIPTION
IO-F-1064	\$ 1,470.00	£ 1,019.00	€ 1,305.00	¥ 12,413.00	Cleaved	Low-Power, SM Fiber Isolator, 1064 nm
IO-F-1064APC	\$ 1,510.00	£ 1,047.00	€ 1,340.50	¥ 12,751.00	FC/APC	Low-Power, SM Fiber Isolator, 1064 nm