



## 1480nm In-line Faraday Rotator

### Key Features

- Low insertion loss
- Excellent stability and reliability
- High power handling

The In-line Faraday Rotator is characterized with low IL, high return loss, high extinction ratio and excellent environmental stability and reliability. It is with fiber in and fiber out. They are ideal for polarization maintaining fiber amplifiers, fiber lasers, and high-speed communication system and instrumentation applications.

### Applications

- Fiber laser
- Fiber amplifier
- Communications



## For more Info

### Please contact us at:

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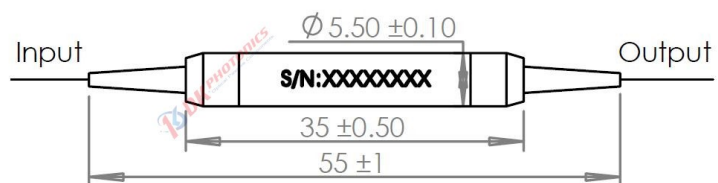
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

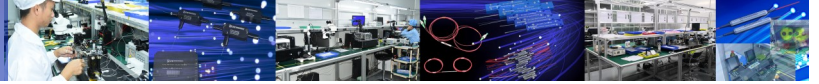
Dahe Road, Longhua Dis.,

Shenzhen, China 518109

### Package Dimension



\*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.



## 1480nm In-line Faraday Rotator

### Performance Specifications

Parameter	Unit	Values
Center Wavelength	nm	1480
Operating Bandwidth	nm	±30
Faraday Rotation Angle (Single Pass)	degree	45 or 90
Rotation Angle Tolerance over Wavelength and Temperature	degree	±1.0
Max. Insertion Loss	45 deg.	0.6
	90 deg.	0.7
Faraday Rotation Angle (Single Pass)	degree	45 or 90
Rotation Angle Tolerance over Wavelength and Temperature	degree	+/-3.0, +/-4.0
Min. Extinction Ratio	dB	20
Min. Return Loss	dB	≥50/50
Max. Optical Power	mW	500
Fiber Type	Option 1: PM→PM	-
	Option 2: SM→PM	PM1550-XP→PM1550-XP
	Option 3: SM→SM	SMF-28e→SMF-28e
Operation Temperature	°C	-5 ~ +70
Storage Temperature	°C	-40 ~ +85
Dimensions	mm	Ø5.5xL35

1. Above specifications are for device without connector.

2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower and ER will be 2dB lower. The default connector key is aligned to slow axis. Power transmits through the connector less than 2W.

3. Higher power up to 20W is possible; please contact DK Photonics for details.

### Order information P/N: ILFR-①-②-③-④-⑤-⑥

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250µm bare fiber pigtail.

①	②	③	④	⑤	⑥
Wavelength	Angle	Fiber Type	Pigtails Diameter	Fiber Length	Connector
14:1480nm	45:45°	1: Option 1	25:250µm bare fiber	05:0.5m	00: None
XX: Others	90:90°	2: Option 2	90:900µm Loose Fiber	10:1.0m	FP: FC/PC
		3: Option 3	XX: Others	15:1.5m	FA: FC/APC
				XX: Others	XX: Others

**Part Number Example:** ILFR-14-45-1-90-10-FA

**Description:** 1480nm in line Faraday Rotator, faraday rotation angle: 45°, PM1550-XP fiber in and PM1550-XP fiber out, with 0.9mm OD loose tube, 1.0m length fiber pigtails, FC/APC connectors at all ports.

### Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.