# **Polarization Maintaining Components**





- Low Insertion Loss
- High Power Handling
- High Extinction Ratio
- Low Cost
- High Reliability

# **Applications**

- Fiber Amplifiers
- Fiber lasers
- Fiber Sensor
- Test and Measurement
- Communications System

### 1550nm In-line Polarizer

The In-line Polarizer is designed to pass light with one specific polarization while blocking the other polarization. It can be used to convert no-polarized light into polarized light with high extinction ratio. It can also be used to enhance the extinction ratio of signals with its excellent polarization properties. It is ideal for high-speed communication systems and test instrumentation where high polarization extinction ratio is required.

If you do not see a standard In-line Polarizer that meets your needs, we welcome the opportunity to review your desired specification and quote a custom In-line Polarizer. Requests for custom fiber pigtails, different wavelengths and handling power of operation or other specific needs will be readily addressed.



# For more Info

#### Please contact us at:

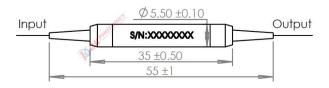
Tel: +86-755-23736280 Fax: +86-755-26746512

E-mail: sales@dkphotonics.com https://www.dkphotonics.com

#### 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.





### 1550nm In-line Polarizer

## **Performance Specifications**

Parameter		Unit	Values	
Operating Wavelength		nm	1550	
Bandwidth		nm	±40	
Typ. Insertion Loss@23°C		dB	0.3	
Max. Insertion Loss@23°C		dB	0.5	
Typ. Extinction Ratio		dB	30	
Min. Extinction Ratio		dB	28	
Min. Return Loss		dB	50	
	Option 1	-	PM1550 →PM1550	
Fiber Type In/Out	Option 2	-	SMF-28e →PM1550	
	Option 3	-	SMF-28e →SMF-28e	
Max. Power Handling		W	0.5, 1, 3, 5, 10	
Max. Tensile Load		N	5	
Operating temperature		°C	-5~+70	
Storage temperature		°C	-40~+85	
Dimension		mm	Ф5.5× L35	

<sup>\*</sup>Above specifications are for device without connector.

## Order information P/N: ILP-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	Power Handling	Fiber Type	Pigtails Diameter	Fiber Length	Connector
13:1310nm	L:<0.5W	1:PM -PM	25:250µm bare	08:0.8m	00: None
14:1480nm	1:1W	2:SM- PM	fiber	10:1.0m	FP: FC/PC
15:1550nm	3:3W	3:SM-SM	90:900µm Loose Fiber	XX: Others	FA: FC/APC
XX: Others	5:5W		XX: Others		SP: SC/PC
					SA: SC/APC
					XX: Others

Part Number Example: ILP-15-1-1-90-10-FA

**Description:** 1550nm In-line Polarizer, 1W Power, PM fiber to PM fiber, with 0.9mm OD loose tube, 1.0m length fiber and 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.

<sup>\*</sup>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. Powers transmit through the connector less than 2W.

<sup>\*</sup>For >10W high power applications, we will use heat sink package, contact DK Photonics for details.

<sup>\*</sup> If there is pulse application, please be sure to inform us of pulse energy and peak power.