



## 980/1064nm Polarization Maintaining WDM/Isolator Hybrid Combination

DK Photonics' WDM//Isolator Hybrid Combination is a combination of a wavelength division multiplexer and an isolator in a compact package. All input and output fibers are polarization maintaining. This product has an extremely low insertion loss, a very stable tap-coupling ratio, high isolation, and high return loss. This product offers integrated solution to amplifier application by combining more functions into a very compact package.

### Key Features

- Compact Size
- Low insertion loss
- High channel Isolation
- High Extinction Ratio
- High stability and reliability

### Applications

- Fiber laser
- Fiber amplifier
- Fiber Sensor
- Communications
- Laboratory R&D



## For more Info

### Please contact us at:

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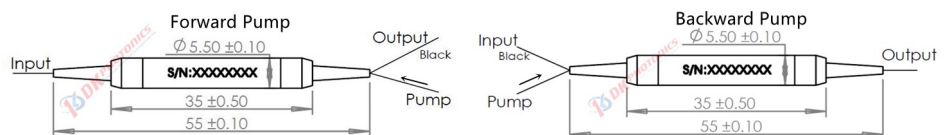
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

Dahe Road, Longhua Dis.,

Shenzhen, China 518109

### Package Dimension



\* Pump port is both axis working.

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

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### Performance Specifications

Parameter	Unit	Values
Stage of Isolator	-	Single Stage
Signal Central Wavelength ( $\lambda_c$ )	nm	1064
Signal Wavelength Range	nm	+/-5
Max. Signal Insertion Loss, $\lambda_c$ , @ 23°C	nm	2.2
Min. Signal Isolation, $\lambda_c$ , @ 23°C(Isolator)	nm	32
Min. Isolation Signal Channel	dB	25
(WDM) Pump Channel	dB	12
Pump Wavelength Range	nm	960~990
Max. Insertion Loss (Pump to Common)	dB	0.7
Min. Extinction Ratio @ 23°C	dB	Type B: 20, Type F: 22
Min. Return Loss	dB	50
Max. Power Handling(CW)	mW	200
Max. Peak Power for Pulse	kW	1, 5, 10
Max. Tensile Load	N	≤5
Fiber Type	-	PM980-XP Panda Fiber or Specified
Operating Temperature	°C	-5 to +70
Storage Temperature	°C	-40 to +85
Package Dimensions	mm	Ø5.5 x L35

- Above specifications are for device without connector.
- 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.
- Type B: Both axis working, Type F: Fast axis blocked, the default is Type B if without request.
- Pump Power can handle up to 10W if require, but for signal power, with this 1064nm Isolator, Due to high IL, it is recommended to use average power of <200mW for 1064nm. If you need higher handle power, please look for our TGG based High power isolator.
- If there is pulse application, please be sure to inform us of pulse energy and peak power.
- If you have questions about the axial direction, please contact us.

### Order information P/N:PMWIH-①-②-③-④-⑤-⑥-⑦-⑧

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	⑦	⑧
Wavelength	Stage	Optical Power	Pump Configuration	Axis alignment (Only for signal)	Pigtail Diameter	Fiber Length	Connector
69:1064 signal /980 pump	S: Single Stage D: Dual Stage	L:<0.5W	F: Forward Pump B: Backward Pump	F: Fast axis blocked, Slow axis working B: Both of axis working	25:250μm bare fiber 90:900μm Loose Fiber XX: Others	05:0.5m 10:1.0m 15:1.5m XX: Others	00: None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC XX: Others

**Part Number Example:** PMWIH-S-69-L-B-F-90-10-FA

**Description:** Polarization Maintaining WDM/Isolator Hybrid Combination, <200mW handling power, 1064nm signal/980nm pump, single stage isolator, backward pump, fast axis blocked, slow axis working, with 0.9mm OD loose tube, 1.0m fiber length, 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.