

1750/1550nm single-mode Taper Wavelength Division Multiplexer



Product Description

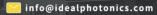
Idealphotonics' tapered wavelength division multiplexing products for optical communications have the advantages of low loss, low polarization-dependent loss, wide operating band and operating temperature range, and no glue in the optical path. This series of products can be used in wavelength division multiplexing systems, fiber optic sensing systems, and fiber optic optical detection equipment.

Part Number

NIR-WDM-W1517-1-9-SA

Product features

Wide operating wavelength range & wide operating temperature range . Low insertion loss . Polarization dependent loss and small polarization mode dispersion. High reliability and stability









Application area

WDM system , Fiber sensing system , Fiber equipment , Fiber laser

Parameters

| Parameter | Unit | Value |
|---------------------------------|------------|-----------------------|
| Central wavelength | nm | 1550/1750 |
| Operating bandwidth | nm | 1550/1750±5 |
| Insertion loss (port1-port2) | dB | 0.19 |
| Insertion loss (port1-port3) | dB | 0.27 |
| Polarization-dependent loss | dB | ≪0.10 |
| Isolation (port1-port2) | dB | 19.84 |
| Isolation (port1-port3) | dB | 31.40 |
| Return loss (incoming/outgoing) | dB | >55dB |
| Maximum operating power | mW | 500 |
| Fiber type | | SMF-28E |
| Pigtail package and length | | 0.9mm loose tube , 1m |
| Connector type | | FC/APC |
| Operating temperature | $^{\circ}$ | -5-70°C |
| Storage temperature | $^{\circ}$ | -40-85℃ |
| Dimensional information | mm | Ф3.0X92 |

Experimental test (1742/1550nm)











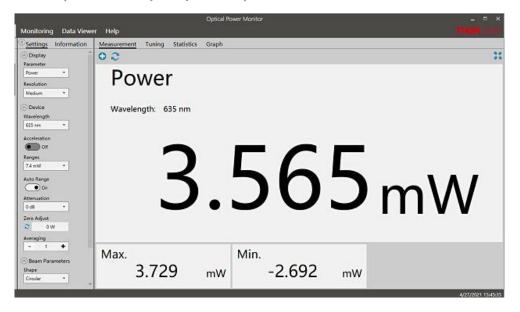
Test steps:

- 1. Install 1550nm and 1742nm lasers;
- 2. Connect the 1550nm laser to port 2 of WDM and the 1742nm laser to port 3;
- 3. Connect the power meter or spectrometer to port 1 to check the output power and test spectrum.

Test Results



1550nm(laser output power)



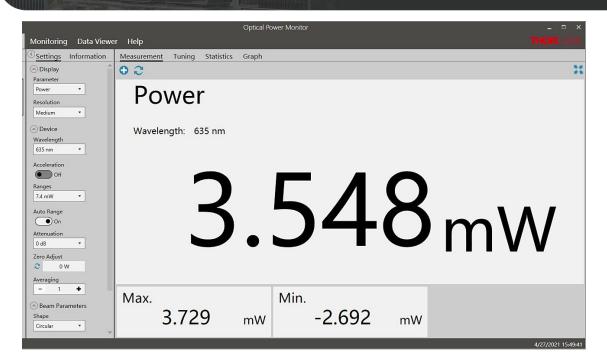
1742nm (laser output power)











1550nm (port 2-port1, only connect to 1550nm)



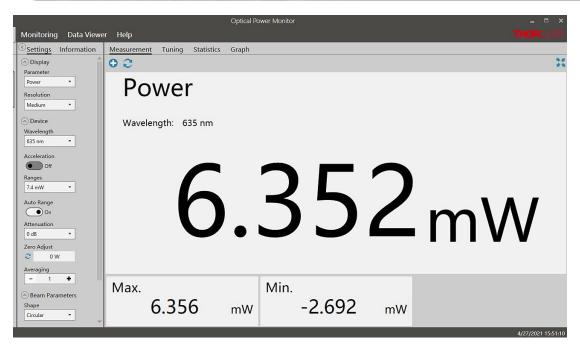
1742nm (port 3-port1, only connect to 1742nm)





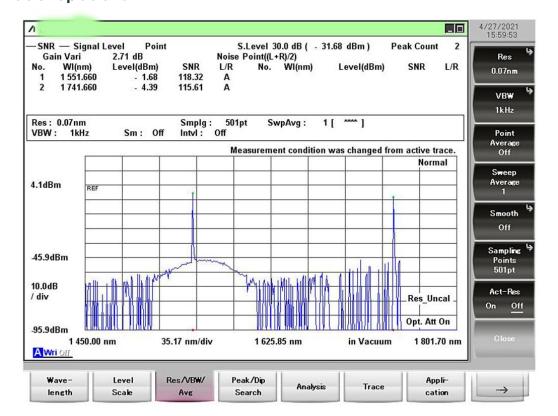


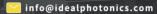




(1550nm, 1742nm are connected at the same time, output power of port1)

Test spectrum



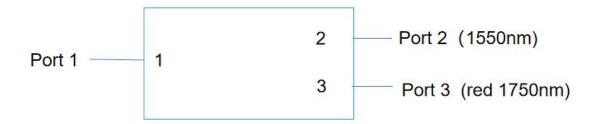








Package form



Ordering Information

Product model: NIR-WDM-W1517-1-9-SA

Working wavelength: 1517: 1550nm/1750nm

Pigtail length: 1: 1 meter

Loose tube: 9: 900um loose tube

Fiber type: SMF-28E

Connector type: FC/APC





