

1480/1550 nm WDM/Tap Coupler/Isolator Hybrid Combination



ACP's WTIH is a combination of a wavelength division multiplexer, tap coupler and an isolator in a compact package. This product has an extremely low insertion loss, a very stable tap-coupling ratio, high isolation, and high return loss. The WTIH is ideal for fiber optic amplifier applications.

All AC Photonics' products are Telcordia qualification tested.

Key Features

- Wide Operating Wavelength Range
- Compact Size
- Low Insertion Loss
- High Channel Isolation
- Ultra Low PDL & PMD
- High Stability and Reliability
- Epoxy Free Optical Path

Applications

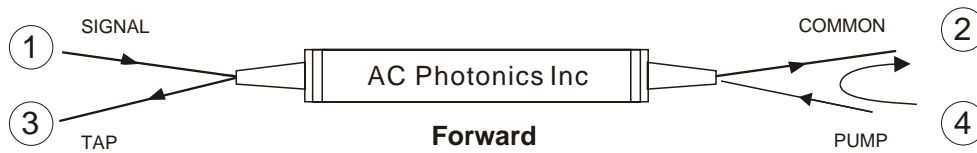
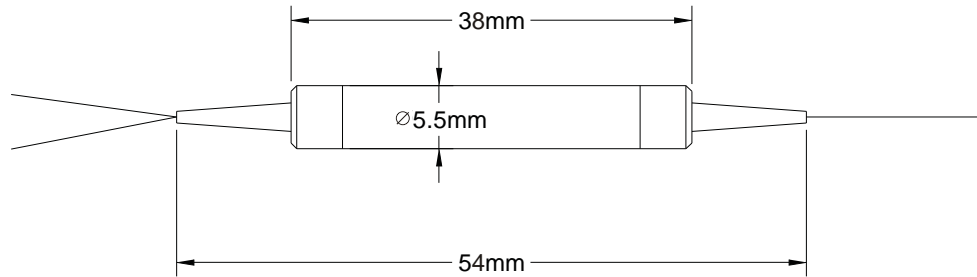
- Fiberoptic Amplifiers
- CATV Fiberoptic Links
- WDM Systems
- Fiberoptic Instruments
- Transmitters and Fiber Lasers
- Laboratory R&D

Performance Specifications

Parameter		Specifications	
		Single Stage	Dual Stage
Signal Operation Wavelength Range	C Band	1530nm to 1565nm	
	L Band	1570nm to 1605nm	
Pump Channel Wavelength Range		1450nm to 1490nm	
Isolation (@23°C, all SOP)		≥ 31dB	≥ 45dB
Isolation (2 to 4 @ 1 signal)		≥ 12dB	
Isolation (1 to 2 @ 1 pump)		≥ 30dB	
Insertion Loss (over wavelength range and 0 to +70°C, all SOP)	Pump Channel	≤ 0.6dB	≤ 0.6dB
	Signal Channel	≤ 1.1dB	≤ 1.3dB
	Nominal Tap Ratio 1%	19.0dB to 20.8dB	19.0dB to 20.8dB
	Nominal Tap Ratio 2%	16.2dB to 18.0dB	16.2dB to 18.0dB
	Nominal Tap Ratio 5%	12.2dB to 4.0dB	12.2dB to 4.0dB
Wavelength Dependent Loss		≤ 0.5dB	≤ 0.5dB
Polarization Dependent Loss		≤ 0.10dB	≤ 0.10dB
Polarization Mode Dispersion (Low PMD Option)		≤ 0.25 (0.05)ps	≤ 0.05ps
Directivity		≥ 55dB	
Return Loss		≥ 50dB	
Optical Power		≤ 300mW	
Operating Temperature		0 to +70°C	
Storage Temperature		-40 to +85°C	
Package Dimensions		Ø5.5 x L38mm	
Fiber Type		Corning SMF-28 fiber	

Note: Values are referenced without connector loss.

Mechanical Dimensions



Ordering Information

WTIH	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
	Wavelength	Stage	Tap Ratio	Pigtail Style	Fiber Length	In/Out Connector
	54 = 1550/1480nm 64 = 1585/1480nm	S = Single Stage U = Dual Stage	1 = 1% 2 = 2% 5 = 5%	1 = Bare Fiber 2 = 900um Jacket	1 = 1.0m 2 = 2.0m	0 = None 1 = FC/APC 2 = FC/PC 3 = SC/APC 4 = SC/PC 5 = ST 6 = LC/UPC 7 = LC/APC