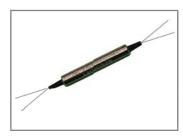


phone: 408.986.9838

email: sales@acphotonics.com website: www.acphotonics.com

# 980/1550 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 hight 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**

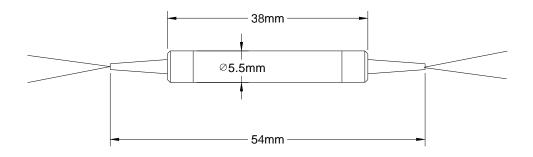
- Fiberoptic Amplifiers
- CATV Fiberoptic Links
- WDM Systems
- Fiberoptic Instruments
- Transmitters and Fiber Lasers
- Laboratory R&D

#### **Performance Specifications**

Parameter		Specifications			
		Single Stage	Dual Stage		
Signal Operation	C Band	1528nm to 1564nm			
Wavelength Range	L Band	1570nm to 1605nm			
Pump Channel Wavelength Range		965nm to 1000nm			
Isolation (@23°C, all SOP)		≥ 31dB	≥ 45dB		
Wavelength Isolation (1 to 3 @ I signal)		≥ 12dB			
Wavelength Isolation (1 to 2 or 2 to 1 @ I pump)		≥ 30dB			
Insertion Loss (over wavelength range and 0 to +70°C, all SOP)	Pump Channel	≤ 0.6dB	≤ 0.6dB		
	Signal Channel	≤ 1.3dB	≤ 1.4dB		
	Nominal Tap Ratio 1%	19.0dB to 20.8dB			
	Nominal Tap Ratio 2%	16.2dB to 18.0dB			
	Nominal Tap Ratio 5%	12.2dB to 14.0dB			
Wavelength Dependent Loss		≤ 0.5dB			
Polarization Dependent Loss		≤ 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 HI 1060 at common/pump port			
		Corning SMF-28 fiber at signal port			

Note: Values are referenced without connector loss.

### **Mechanical Dimensions**





## **Ordering Information**

WTIH						
	Wavelength	Stage	Tap Ratio	Pigtail Style	Fiber Length	In/Out Connector
	59 = 1550/980nm 69 = 1585/980nm	S = Single Stage U = Dual Stage	1 = 1% 2 = 2% 5 = 5% etc	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