# 1480/1550(1585)NM WDM/ TAP COUPER/ ISOLATOR HYBRID COMBINATION

## WTIH1514 Series

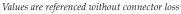
### **Product Description**

Oplink'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, and a very stable tap-coupling ratio. Fiber optic amplification is the ideal application for this product.

Oplink can provide customized designs to meet specialized feature applications. Also, Oplink offers modular assemblies that integrate other components to form a full function module or subsystem.



WTIH1514 Series			Single Stage	Dual Stage	Unit		
Operating Wavelength Range		Signal Channel		C band : 1528 ~ 1564 L band : 1570 ~ 1605		nm	
		Pump Channel		1450 ~ 1495		nm	
Insertion Loss [1]		Signal Port		< 1.1	< 1.2	40	
		Pump Port		< 0.6		- dB	
		Tap Port	1% Tap Ratio	19.2 ~	~ 21.0		
			2% Tap Ratio	16.2 ~ 18.0		dB	
			5% Tap Ratio	12.2 ~ 14.0			
			10% Tap Ratio	9.6 ~ 10.8			
Wavelength Dependent Loss		Signa	l to Common	< 0.4	< 0.5	dB	
Wavelength Isolation	Signal to Common @ Pump Wavelength Range		> 25		- dB		
	Pump to Common @ Signal Wavelength Range		> 15				
Reverse Direction Isolation (over signal wavelength range, 0~70°C, all SOP)		Common to Signal		> 21	> 36	dB	
Polarization Dependent Loss			< 0.1	< 0.2	dB		
Polarization Mode Dispersion (standard)			< 0.25	< 0.05	ps		
Directivity				≥ 55		dB	
Return Loss				≥ 50		dB	
Maximun Power Handling				≤ 500		mW	
Operating Temperature				0 to +70		°C	
Storage Temperature				-40 to +85		°C	
	Signal & Tap Ports			Corning SMF-28			
Fiber Type	Common & Pump Ports			Corning HI1060 FLEX			
Package Dimension [3]				P2 : (Ø) 5.5 x (L) 40.0		mm	
Values are referenced withou	nut commac	tor loce				,	



<sup>&</sup>lt;sup>[1]</sup> The maximum IL is under all states of polarization and within the full operating temperature and wavelength ranges specified. Add 0.3dB on signal port IL for 10% tapping case.



#### **Features**

- Wide Operating Wavelength Range
- Compact Size
- High Isolation
- ♦ Ultra Low PDL & PMD
- High Stability & Reliability
- Epoxy-free Optical Path

#### **Applications**

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



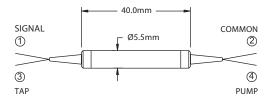
 $<sup>^{[2]}</sup>$  All the parameters are excluding connectors.

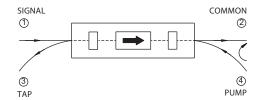
 $<sup>^{[3]}</sup>$  The mechanical tolerance should be +/-0.2mm on all package dimensions unless otherwise custom specified.



## WTIH1514 SERIES

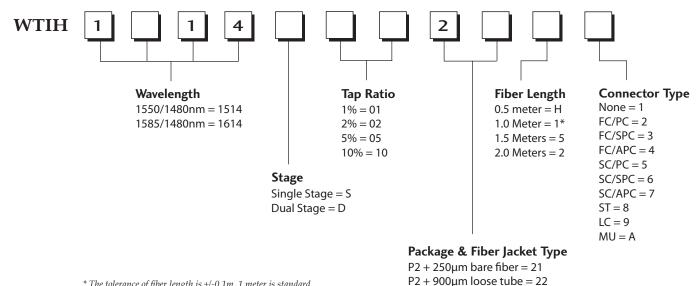
## **Mechanical Drawing / Package Dimensions (dimension in mm)**





## **Ordering Information**

Oplink can provide a remarkable range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.



<sup>\*</sup> The tolerance of fiber length is +/-0.1m. 1 meter is standard. The lead-time for special fiber length will be longer.