

[OEMWC-100]

Multi-wavelengths Combiner



Fig.1. OEMWC-100 Four-wavelengths Combiner

Features:

- For combing up to 6 laser wavelengths into a single fiber
- Laser wavelengths minimum separation of 10 nm
- Available in the range 400-2000 nm
- Can be also used in reverse mode: to split wavelengths
- SM or PM-fibers, MM and DCFs also available
- Connectors: FC-SC-LC/PC; FC-SC-LC /APC
- A single-box package with multiple ports
- Best specifications available in the industry
- High-efficient and cost-effective
- High-power version available

Applications:

- Color holography and imaging systems
- Laser spectroscopy
- Confocal microscopy
- Fluorescence microscopy
- Any other applications requiring combining of multiple laser sources with close wavelengths
- Research and Development
- Laboratory testing



Product description:

The new OEMWC-100 Multi-wavelengths Combiner from O/E Land Inc. is based on our advanced bulk grating technology, providing the ability to combine several close laser wavelengths into a single fiber output. The wavelengths to be combined can be customer specified, and they can be as close as 10 nm apart. The device has the possibility to combine any wavelengths in the 400-2000 nm range. The number of the wavelengths (channels) to be combined can be also customized.

The OEMWC-100 Multi-wavelength combiner is a high-efficient and cost-effective solution, which has low channel loss, and high channel isolation. The device comes into a single-box enclosure with multiple fiber ports. The available fiber types are SM, PM, MM, DCF, and the fiber outputs can be terminated with connectors by request.

The same device can be also used as a wavelength splitter, as it is a bi-directional device, whenever the need is to split several close laser wavelengths coming from a single fiber.

Product specifications:

Parameter	Unit	Value		
Туре		Multi-wavelengths Laser Combiner		
Port configuration		2x1, 3x1, 4x1, 5x1, 6x1		
Wavelengths range	nm	400 - 2000		
Channel wavelengths*	nm	custom specified		
Channel separation (min)	nm	10		
Channel insertion loss	dB	< 1.0		
Channel isolation	dB	> 30		
Power handling**	mW	500		
Fiber types	-	SM, PM, MM, DCF		
Connectivity	-	Fiber pigtailed; Fiber connectors		
Package dimensions	mm	400x80x40		
Operating temperature	°C	0 to 60		
Storage temperature	°C	-40 to 85		

* Some limitations apply.

** High-power version available.

O/E LAND INC.

Product spectrum (sample):



Fig.2. Spectrum of a Four-wavelengths Laser Combiner

Ordering number for OEMWC-100:

Number of	Channel separation	Starting WL	Pigtail type		Connector		Fiber Length
channels	(nm)	(nm)					
1 to 6	10	Center Wavelength	900 Tubing	T1	Fiber pigtail	C0	Default: 1m
			3mm Jacket	T2	FC/PC	C1	Custom: indicate value
					FC/APC	C2	
					SC/PC	C3	
					SC/APC	C4	
					LC/PC	C5	
					LC/APC	C6	
Example:	Multi-wavelength combine OEMWC-100-3-1030-T1-C	er; 3 channels, 1030+104 2-1	40+1050 nm; 900	0 um t	ubing; FC/APC	connecto	rs; 1 m fiber length: