

[OEPAS-MWC-100]

Multi-wavelengths Combiner

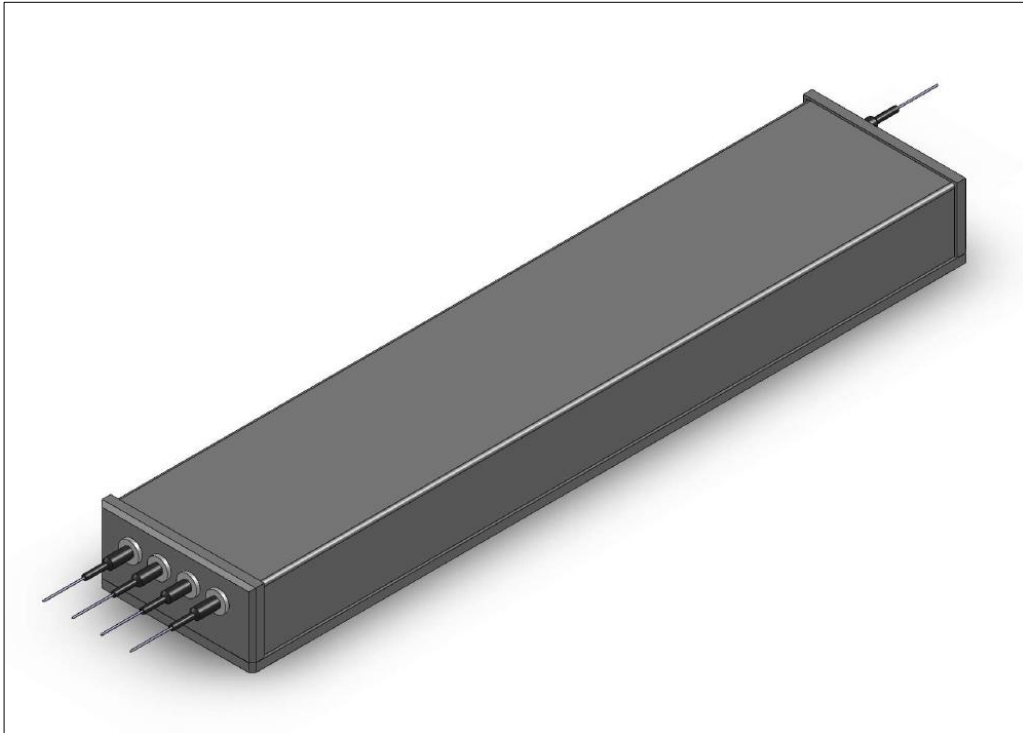


Fig.1. OEMWC-100 Four-wavelength Combiner

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 OEPAS-MWC-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 OEPAS-MWC-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	OEPAS-MWC-100
Type		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.

**Tuning range can significantly vary depending on FBG specifications.

*** Recommended values. The ambient environment temperature can limit the performance, incl. the tuning range.

Product spectrum (sample):

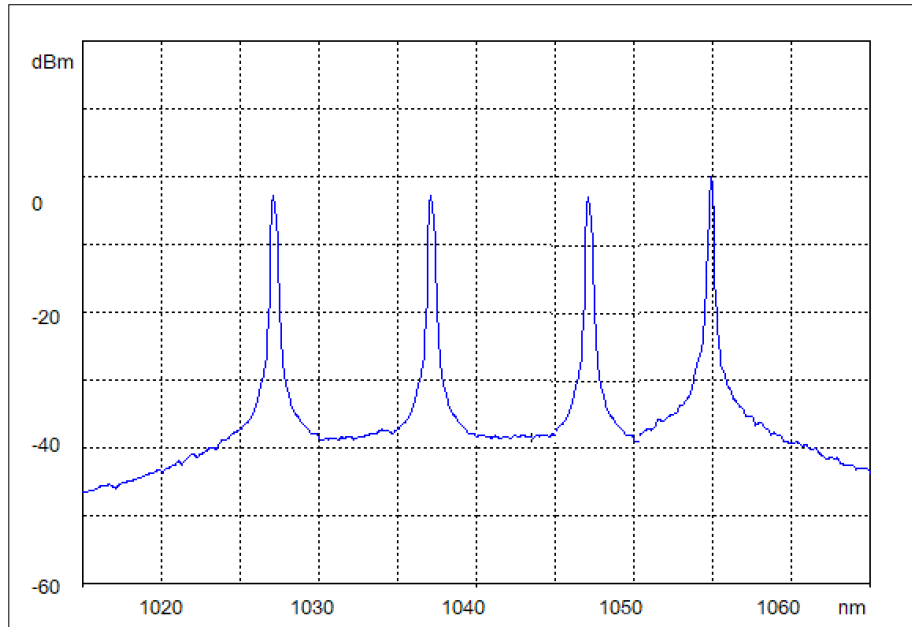


Fig.2. Spectrum of a Four-wavelengths Laser Combiner

Ordering number for OEPAS-MWC-100:

Number of channels	Channel separation (nm)	Starting WL (nm)	Pigtail type	Connector	Fiber Length
1 to 6	10	Center Wavelength	900 Tubing T1 3mm Jacket T2	Fiber pigtail C0 FC/PC C1 FC/APC C2 SC/PC C3 SC/APC C4 LC/PC C5 LC/APC C6	Default: 1m Custom: indicate value
Example:	Multi-wavelength combiner; 3 channels, 1030+1040+1050 nm; 900 um tubing; FC/APC connectors; 1 m fiber length: OEPAS-MWC-100-3-1030-T1-C2-1				