

[OEWBC-100]

Two-wavelengths Beam Combiner/Splitter



Fig.1. OEWBC-100 Two-wavelengths Beam Combiner

Features:

- For combing two laser wavelengths into a single fiber
- Laser wavelengths minimum separation of 200 nm
- Available in the wavelength range 400-2000 nm
- Can be also used in reverse mode: to split wavelengths
- SM or PM-fibers, MM also available
- Connectors: FC-SC-LC/PC; FC-SC-LC /APC
- A compact package in small box
- Best specifications available in the industry
- High-efficient and cost-effective

Applications:

- Optical communication systems
- Optical testing systems
- Fiber sensors
- Optical power distribution
- Fiber amplifiers
- Biomedical instrumentation
- Research and Development
- Any other applications requiring combining of multiple laser sources with close wavelengths

Product description:

The OEWBC-100 Two-wavelengths Beam Combiner from O/E Land Inc. is a micro-optical device, based on our advanced thin-filter technology, providing the ability to combine two distant laser wavelengths into a single fiber output. The wavelengths to be combined can be customer specified, and they should be with at least 200 nm apart. The device has the possibility to combine wavelengths in the whole range 400-2000 nm.

The OEWBC-100 Two-wavelength combiner is a high-efficient and cost-effective solution, which has low channel loss, and high channel isolation. The device comes into a small compact box enclosure with three or four fiber ports. The available fiber types are SM, PM, MM, 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 two distant laser wavelengths coming from a single fiber.

Product specifications:

Parameter	Unit	Value
Type		Two-wavelengths Beam Combiner
Port configuration		2x1, 2x2
Wavelengths range	nm	400 - 2000
Channel wavelengths*	nm	custom specified
Channel separation (min)	nm	200
Channel insertion loss	dB	< 1.0
Channel isolation	dB	> 30
Power handling	mW	500
Fiber types	-	SM, PM, MM
Connectivity	-	Fiber pigtailed; Fiber connectors
Package dimensions	mm	25x25x25
Operating temperature	°C	0 to 60
Storage temperature	°C	-40 to 85

* Some limitations apply.

Ordering number for OEWBC-100:

Port configuration	Wavelength #1 (nm)	Wavelength #2	Pigtail type	Connector	Fiber Length
2x1 2x2	Wavelength #1 to be combined	Wavelength #2 to be combined	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:	Two-wavelength combiner; 2x1, 975/2000 nm; 900 um tubing; FC/APC connectors; 1 m fiber length: OEWBC-2x1-975/2000-T1-C2-1				