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[OEUBS-100]

U-Bench Workstation

Features:

- Free-space optical connection
- Pigtailed or receptacle version
- FC/PC and FC/APC compatible
- SM, PM, MM fibers
- Standard air gap of 30 mm
- Custom lengths of the gap available
- Optional mounts for 1”(25 mm) optics
- Possibility for placing up to 2 pcs of optics
- Kinematic holder for the optics as an option

Applications:

- Building functional optical modules, like filters, polarizers, splitters, etc.
- Where access of the laser beam is needed
- As free-space optical connection
- Material absorption spectrum
- Testing and measuring
- Biomedical
- R&D Projects

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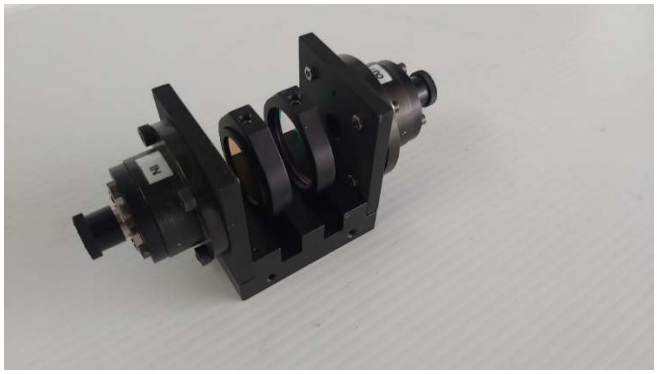
Product description:

The compact U-Bench workstation from O/E Land Inc. with model number **OEUBS-100** comes with two built-in collimators and pre-set air gap in between. The input collimator launches the light into the free-space gap, while the output collimator couples it again into the fiber. The free-spaced light beam in the gap can be easily accessed for the purposes of building of functional optical modules by placing various optical components. The possible optics include filters, mirrors, waveplates, polarizers, beam splitters, etc. Another common application of the **OEUBS-100** product is as a free-space optical connection, frequently used in the high-power fiber lasers.

The U-bench can be manufactured either as fiber-pigtailed, or receptacle. The receptacle version has standard compatibility for FC/PC connectors, but as optional, can be also produce with FC/APC compatibility. The input collimator delivers beam with approximate size of 1 mm, but larger beam sizes are also available (by request).

The air gap has a standard pre-fixed length of 30 mm, but tit can also be customized. The platform utilizes mounting holes, on which a holder for optics can be fixed. Up to two holders are available for placing in one device. The holders can accommodate any other optical components with the standard size of 1” (25 mm).

OEUBS-100-F



OEUBS-100-F-2

For precise alignment of the optics, as well as to improve the coupling efficiency of the device, a kinematic holder for the optics is also available as an option. It will allow fine adjustment of the tilt angles of the optics, which will help to minimize the losses caused by the physical misalignment.

OEUBS-100-F-K

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Placing samples of different materials or substances on the platform between the two collimators into the path of the light beam, to test the absorption spectrum, is another possible application of the U-Bench. Especially for this kind of applications, a variant of our standard U-Bench was designed. The **OEUBL-100** has an extended air gap length (135 mm) and a platform with V-shaped base, which allows circular gas cells containers, liquid material samples cylinder and other containers with biomedical substances, to be easily placed into the light path. The platform's V-groove shaped base provides quick and simple centering for the sample's containers. The beam from the input collimator illuminates the sample material and the output collimator is used to collect the light from the tested material, which represents the material absorption.

OEUBS-100-L

Product specifications:

Parameters	Unit	OEUBS-100	OEUBS-100-F OEUBS-100-F-2	OEUBS-100-F-K	OEUBS-100-L
Gap length	mm	30	40	80	135
Beam size (when used with SMF)	mm	2.8	2.8	2.8	2.8
Beam center height (measured from the top of platform)	mm	10	15.5	58	13.5
Operating wavelengths	nm	300-2500	300-2500	300-2500	300-2500
Operating power	mW	500	500	500	500
Connectivity	-	Fiber pigtailed; Receptacle for FC/PC or FC/APC			
Fiber type	-	SM, PM, MM			
Operating temperature	°C	0 to 60			
Storage temperature	°C	-20 to 80			
Dimensions (LxWxH)	mm	90x46x40	100x55x50	150x90x70	200x46x40

Ordering number:

OEUBS-100:	U-Bench working station (standard)
OEUBS-100-F:	U-Bench working station with one filter
OEUBS-100-F-2:	U-Bench working station with two filters
OEUBS-100-F-K:	U-Bench working station with one filters and kinematic holder
OEUBS-100-L:	U-Bench working station with extended gap (long)