### Beam Combiner $2 \rightarrow 1$ , 48-MCS-008

Compact, rugged and highly efficient opto-mechanical unit with polarization dependent beam combiner



#### FEATURES

Beam Combiner 48-MCS-008

- Configuration  $2 \rightarrow 1$
- Highly efficient coupling into polarizationmaintaining fiber cables
- Superposition with normal states of polarization
- Compact, rugged, transportable and sealed optomechanical units
- Fully fiber-coupled
- Very high long-term stability, efficiency and reproducability

#### DESCRIPTION

This fiber-coupled Beam Combiner  $2 \rightarrow 1$  is a compact opto-mechanical unit that combines 2 fiber -oupled sources into 1 output fiber cable with high efficiency.

#### **Optical Setup**

The input ports are fiber-coupled to PM fiber cables, respectively.

The radiation is superimposed by means of a polarizing beam splitter. I.e. the two sources are superimposed with normal states of polarization.

#### **Fiber Couplers**

A fundamental component of a fiber-coupled Beam Splitter are the <u>Laser Beam</u> <u>Couplers</u>, which are the inputs into the opto-mechanical unit collimating the input radiation and, finally, couples the radiation back into the common polarizationmaintaining fiber cable. The stability of the total Beam Splitter is determined by the <u>stability</u> of the laser beam coupler.

#### How to order

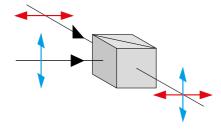
For a detailed quotation please additionally specify

- Wavelength (range)
- Receptacle type

If you need a system with fiber cables, please additionally specify



- Fiber type Output
- Cable lengths
- Connector types



### **TECHNICAL DATA**

Beam Combiner 2 → 1, 48-MCS-008

Order code	48-MCS-008
Configuration	$2 \rightarrow 1$
Available wavelengths	400 - 1700 nm, monochromatic
Fiber type	polarization-maintaining
Connector type	FC APC (standard)
Cable lengths	Customer-specific
Transmission	≥ 75 % @ 780 nm
Polarization Extinction Ratio	≥ 23 dB @ 780 nm

### DOWNLOADS



980129090599.pdf (Dimensional drawing)



## **DATA SHEET**

This is a printout of the page https://sukhamburg.com/products/details/48-MCS-008 from 4/29/2024

## CONTACT

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