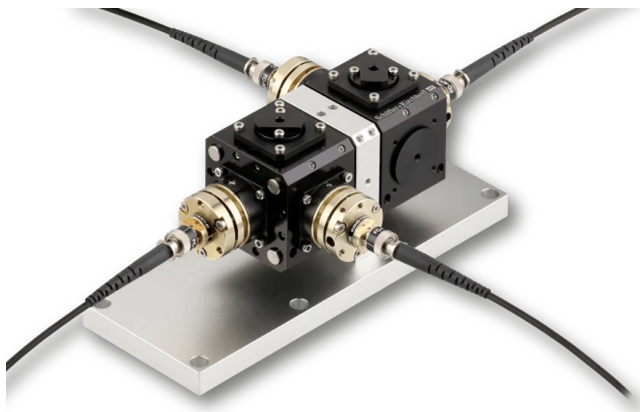


48-RGB-003

Dichroic RGB Beam Combiner



FEATURES

Dichroic RGB Beam Combiner

- Configuration with 3 input ports
- Based on dichroic long-pass or short-pass mirrors
- Large variety of edge wavelengths
- Polarizer for increasing the PER at the common output
- Highly efficient coupling into polarization-maintaining fiber cables
- Compact, rugged, transportable and sealed opto-mechanical units
- Fully fiber-coupled
- Very high long-term stability, efficiency and reproducibility

-
- RGB fiber optic components



DESCRIPTION

This dichroic RGB Beam Combiner is a compact opto-mechanical units that combines three fiber-coupled sources with different wavelengths into a common output fiber cable with high efficiency.

Optical Setup

The three input ports are fiber-coupled to [PM fiber cables](#).

The different wavelengths are superimposed by means of dichroic mirrors. A summary of typical splitters can be found [here](#).

At the output port, a polarizer is placed in order to define the polarization at output of the system.

Fiber Couplers

A fundamental component of the fiber-coupled RGB Beam Combiner is the [Laser Beam Coupler](#), which is the input into the opto-mechanical unit collimating the input radiation, respectively and, finally, couples the radiation back into the polarization-maintaining fiber cable. The stability of the total fiber-coupled Beam Combiner is determined by the [stability](#) of the laser beam coupler.

TECHNICAL DATA

48-RGB-003

Order code	48-RGB-003
Configuration	3 → 1
Wavelengths	Customer-specific
Fiber type	polarization-maintaining
Connector type	FC APC (standard)
Cable lengths	Customer-specific
Transmission	Dependent on the used dichroics
Dimensions (w/o fiber cables)	nn x nn x nn mm

TECHNOTES

- [Connecting multicube assemblies to a base plate](#)
[How to connect the self-supporting multicube system](#)

DOWNLOADS



[980129090631_kuz.pdf](#) (Dimensional drawing)

RELATED PRODUCTS

**DICHROIC RGB BEAM
COMBINER**

Compact, rugged and highly efficient opto-mechanical unit for combining several wavelengths

**RGB FIBER
COLLIMATOR SERIES
60FC**

for collimating radiation exiting an optical fiber or as an incoupler

**RGB LASER BEAM
COUPLERS SERIES
60SMS**

for coupling into single-mode and polarization-maintaining fiber cables

This is a printout of the page <https://sukhamburg.com/products/details/48-RGB-003> from 5/2/2024

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