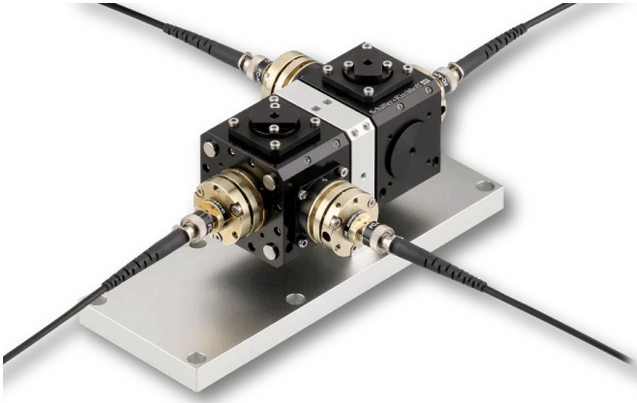


## 48-RGB-001

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
- Highly efficient coupling into polarization-maintaining or single-mode 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 input ports are fiber-coupled to [PM fiber cables](#) or to [SM fiber cables](#).

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

#### Fiber Couplers

A fundamental component of the fiber-coupled 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 or single-mode 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-001

|                |  |
|----------------|--|
| Order code     | 48-RGB-001                                 |
| Configuration  | 3 → 1                                      |
| Wavelengths    | Customer-specific                          |
| Fiber type     | polarization-maintaining<br>or single-mode |
| Connector type | FC APC (standard)                          |
| Cable lengths  | Customer-specific                          |
| Transmission   | Dependent on the used dichroics            |

## TECHNOTES

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

## DOWNLOADS



[980129090636\\_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

**POLARIZATION  
ANALYZER SK010PA**

Measurement tool for coupling into polarization-  
maintaining fiber cables

This is a printout of the page <https://sukhamburg.com/products/details/48-RGB-001> from 5/5/2024

## CONTACT

For more information please contact:

Schäfter + Kirchhoff GmbH

Kieler Str. 212

22525 Hamburg

Germany

Tel: +49 40 85 39 97-0

Fax: +49 40 85 39 97-79

[info@sukhamburg.de](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://www.sukhamburg.com)

## LEGAL NOTICE

**Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.**

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [\[more\]](#)