

External optical module for beam splitter



Summary of Content

External optical modules for beam splitters allow precise splitting or combining of light beams across multiple wavelengths, polarizations, or channels, and are available in plate, cube, and pellicle configurations.

Overview

External optical modules are pre-assembled systems that integrate beam splitters with supporting optics, mounts, and alignment frames to facilitate beam splitting or combining in laser, imaging, and photonics applications. These modules are designed to handle multiple wavelengths, polarization states, or intensity ratios, and can be used in spectroscopy, interferometry, microscopy, and high-precision imaging systems .

Types of Modules

- **Dual and Triple Beam Modules:** Modules like JCOPTIX MOB2 and MOB3 allow splitting or combining of two or three beams, respectively. They include mirrors and dichroic coatings to separate beams into specific wavelength bands, e.g., 400–490 nm, 490–550 nm, and 550–750 nm .
- **Broad-Spectrum Modules:** Some modules handle broad-spectrum light sources (390–800 nm) and can combine or split beams while maintaining polarization, suitable for lasers and broadband illumination .
- **Cube Beam Splitter Modules:** These consist of two right-angle prisms cemented together with a partially reflective coating on one prism. They provide equal optical path lengths for transmitted and reflected beams, minimal beam shift, and are suitable for high-power or high-precision applications .

Article Content

Beam Splitter Selection Guide

An Optical Beamsplitter is an optic or optical device that is used to split a beam of light in two. Newport offers a wide variety of

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Some industries that use beamsplitters are interferometry, bio-medical, metrology, life sciences, microscopy, fiber optics,

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Find top-quality Beamsplitters for laser systems & more. Shop a variety of beamsplitters at Edmund Optics for precision light splitting

Diffraction Optics

A Diffraction Beam Splitter splits the incident laser beam into a 1-dimensional or 2-dimensional array of beams. Typically diffraction

Optical Beamsplitter

A beamsplitter is an optical component used to split a beam of incident light into two parts in a laser or illumination system. Cube

Holo/Or Design & Manufacture Diffraction Optical Elements & Micro

Holo/OR develops, designs & manufactures Diffraction Optical Elements, micro-optics and opto-mechanical modules for laser

Beam splitter

The diffraction beam splitter is used with monochromatic light such as a laser beam, and is designed for a specific wavelength and

Beam Splitter Modules

Explore Siskiyou's beam splitter modules for precise optical experiments. Our beam splitter modules offer exceptional performance

Beam Splitting/Combining Modules-JCOPTIX MALL

JCOPTIX offers a variety of laser beam splitting and combining modules. In the application scenario of beam combining, different

Contact Us

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