

The enumeration type of the beam splitter is



Article Overview

In software or optical modeling, beam splitters are often represented as an enumeration type with values like Cube, Plate, Pellicle, Polarizing, and Dichroic.

In programming or simulation environments, an enumeration (enum) type is used to define a set of named constants representing different categories of beam splitters. This allows developers or optical engineers to select a beam splitter type in a structured way without using arbitrary strings or numbers. Typical enum values include:

- Cube: Represents a cube beam splitter made from two right-angle prisms cemented together, commonly used for equal optical path lengths in interferometry .
- Plate: Represents a flat plate beam splitter, often coated on one surface, used in general optical setups where path length differences are less critical .
- Pellicle: A very thin, flexible beam splitter that minimizes ghost reflections, often used in photography or laser systems .
- Polarizing: Splits light into orthogonal polarization states, such as a Wollaston prism .
- Dichroic: Reflects certain wavelengths while transmitting others, used in multi-wavelength systems . Using an enumeration type ensures type safety and clarity in code, for example:

```
enum BeamSplitterType { Cube, Plate, Pellicle, Polarizing, Dichroic}
```

This approach is common in optical simulation software, instrument control APIs, an...

Article Content

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The Buyer's Guide to Beam Splitters | Blue Ridge Optics

Beam splitters are the unsung heroes of the optics world. These optical components divide incident light into two

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Selecting the Right Beamsplitter

Selecting the Right Beamsplitter Beamsplitters are optical components that split light into two directions,

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What Is a Beam Splitter? Types, Uses, and How It Works

A beam splitter is an optical device that takes a single beam of light and divides it into two separate beams. One portion passes

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Beam Splitter

The beam-splitter directs a second beam of light to the sample where it is reflected. The two beams of light return to the beam-splitter

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Fiber-optic splitter

A fiber-optic splitter, also known as a beam splitter, is based on a quartz substrate of an integrated waveguide optical power

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6.1.2.1 IfcBeamTypeEnum

6.1.2.1 IfcBeamTypeEnum 6.1.2.1.1 Semantic definition This enumeration defines the different predefined types of beams that can

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Beam Splitters: Explained

The diffractive beam splitter allows the creation of any type of spot arrays (1D, 2D, or irregular) while maintaining high

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Beam splitter

A beam splitter is an optical device that splits an incident beam of light into two or more output beams, typically by allowing a portion

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What are Beamsplitters?

Beamsplitters are often classified according to their construction: cube or plate (Table 1). Cube beamsplitters are constructed using

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Beamsplitter Nomenclature

Furthermore, there are three different functional types. These are denoted „unpolarized“, „non-polarizing“ and „polarizing“,

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beamsplitters selection guide

A beamsplitter is an optic that splits light into 2 directions. The split ratio of light transmittance and reflectance is 1:1 and is called a

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Diffraction beam splitter

A diffractive beam splitter can generate either a 1-dimensional beam array (1xN) or a 2-dimensional beam matrix (MxN), depending

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Fundamental properties of beam-splitters in classical and quantum optics

Abstract. A lossless beam-splitter has certain (complex-valued) probability amplitudes for sending an incoming photon into one of two

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How Beamsplitters Work: Types, Mechanisms, and Applications

This article explains the working principles of beamsplitters, detailing how they divide a beam of light into two separate

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Diffraction Multispot Beam splitter

A diffractive beam splitter splits a laser beam into multiple beams with same characteristics as input beam. Principle of operation and

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IfcBeamTypeEnum

This enumeration defines the different predefined types of beams that can further specify an IfcBeam or IfcBeamType. HISTORY

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IFC4.3.x-development/docs/schemas/shared/IfcSharedBldgElements/Types ...

This enumeration defines the different predefined types of beams that can further specify an IfcBeam or IfcBeamType. HISTORY

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Optical Beamsplitters Explained | Cube & Polarizing Types

Laser beam splitters separate a laser beam into two sections and are typically designed to reflect part of the beam,

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Beam Splitter

8.11.1 The Beam Splitter The beam splitter is an optical device of great importance, effecting a linear transformation of fields

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How to Select a Beamsplitter

Learn how to select a beamsplitter for your optical needs. Explore types, applications, and considerations and get expert insights now!

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Beam Splitter Selection Guide

Our beam splitters are made from high grade glass material with laser grade surface flatness & surface quality for tighter tolerance

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Understanding Beamsplitters: A Comprehensive Guide

Beamsplitters are primarily categorized into two types, polarizing and non-polarizing, each with its own uses in optical systems.

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Beam Splitter

Beam-splitting metasurfaces are classified into two types depending on the incident polarization, it is a polarizing beam splitter if the

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An Introduction to beam splitter

A beam splitter is an optical element that splits incident light into two beams of the same wavelength or two beams of different

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Beam splitter

A third version of the beam splitter is a dichroic mirrored prism assembly which uses dichroic optical

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Beam Splitters — Abridged Guide

Beam splitters are classified by construction (plate, cube, pellicle, polka dot) and by function (standard, non-polarizing, polarizing,

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