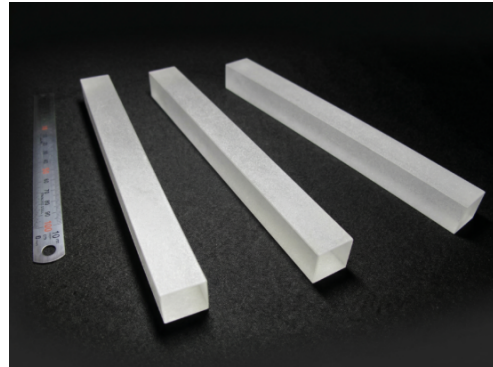


SCINTILLATION CRYSTALS

BGO Scintillation Crystal

Product Brochure & Technical Reference

Bismuth germanate is a dense oxide scintillator for gamma detection and detector research. Define crystal geometry, optical finish, reflector and sensor coupling for the system.



Reference product image. Shown geometry is illustrative.

Material reference properties / options

Parameter	Typical Value
Chemical formula	Bi ₄ Ge ₃ O ₁₂
Crystal structure	Cubic
Density	7.13 g/cm ³
Hygroscopicity	Non-hygroscopic
Light yield	Approx. 8,000-8,500 photons/MeV
Decay time	Approx. 300 ns
Emission peak	Approx. 480 nm
Refractive index	Approx. 2.15 at 480 nm

Reference values and options for selection. Confirm the material grade, geometry, test conditions and acceptance criteria for the quoted configuration.

SCINTILLATION CRYSTALS

Configuration & quotation

Define the component around your application

Application examples: High-energy physics calorimeters and gamma detectors; Anti-Compton shields for gamma spectroscopy systems; Geological exploration and well logging instruments

BGO Scintillation Crystal Specifications

Parameter	Typical Value
Effective atomic number	Approx. 73
Melting point	Approx. 1,050 C
Mohs hardness	Approx. 5.0
Cleavage plane	None
Energy resolution	Approx. 10-12% at 662 keV
Intrinsic background	No Lu-176 intrinsic background

BGO Scintillation Crystal Specifications

Format	Details
Polished blocks / cubes	From small detector elements to large blocks for calorimeter projects
Cylinders	Standard diameters and custom lengths for well logging and gamma detection systems
Annular / well shapes	Custom machined well configurations for anti-Compton shield designs
Pixelated arrays	Custom 1D and 2D arrays with reflector options for imaging and detector modules
Surface finish	All-side polished, lapped, roughened, or painted with diffuse reflector on request
Reflector options	BaSO4, ESR, PTFE, or project-specific reflector design

Prepare your quotation

RFQ input	Information to provide
Material / format	State the material or grade, crystal, screen, panel or bar format and intended application.
Geometry / finish	Provide a drawing, dimensions, tolerances, surface treatment and wrapping or support requirements.
Readout / acceptance	Give the optical readout arrangement and define the test conditions and acceptance criteria.
Order details	Provide quantity, destination and the required delivery schedule.

Reference values and options for selection. Confirm the material grade, geometry, test conditions and acceptance criteria for the quoted configuration.

Send drawings for engineering review

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Open product and inquiry page | Hangzhou, Zhejiang, China