

ENCAPSULATED SCINTILLATORS

LaBr3(Ce) Scintillator

Product Brochure & Technical Reference

LaBr3(Ce) scintillator components for gamma-spectroscopy projects. Review the crystal dimensions, moisture protection, optical window and readout interface for the quoted configuration.



Reference product image. Shown geometry is illustrative.

Material reference properties / options

Property	Typical Value
Density	5.08 g/cm³
Melting point	1116 K
Thermal expansion coefficient	8 x 10 ⁻⁶ /C along C-axis
Hygroscopic	Yes
Wavelength of emission maximum	380 nm
Refractive index at emission maximum	About 1.9
Primary decay time	0.016 us, or 16 ns
Light yield	63 photons/keV gamma

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

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Configuration & quotation

Define the component around your application

Application examples: Industrial coal and mineral assay instruments; Medical SPECT and organ-specific gamma detection; High-energy physics detector systems

Properties of LaBr₃(Ce) Scintillator

Property	Typical Value
Cleavage plane	<100>
Photoelectron yield for gamma rays	165% of NaI(Tl)

Typical Specification

Model	Crystal Size	Encapsulation	Energy Resolution, Cs-137
LB-D25H25	Dia. 25.4 x 25.4 mm	Aluminum housing with optical window	<3.5% at 662 keV
LB-D25H50	Dia. 25.4 x 50.8 mm	Aluminum housing with optical window	<3.5% at 662 keV
LB-D38H38	Dia. 38.1 x 38.1 mm	Aluminum housing with optical window	<3.5% at 662 keV
LB-D50H50	Dia. 50.8 x 50.8 mm	Aluminum housing with optical window	<3.5% at 662 keV

Prepare your quotation

RFQ Item	Information to Provide
Application	Isotope identification, spectroscopy, well logging, security, medical or research detector.
Crystal size	Diameter, height, tolerance and preferred standard model if applicable.
Resolution target	<3.5%, <3.0% or custom target at Cs-137 662 keV.
Encapsulation	Housing material and outside dimensions, optical-window material and aperture, mounting interface and sealing requirement.
Readout	Photosensor type, optical coupling and the measurement configuration used to evaluate the scintillator.
Order information	Quantity, inspection report requirements, packaging and requested delivery date for review.

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

sales@atrscintillator.com | +86 17796747312

Open product and inquiry page | Hangzhou, Zhejiang, China