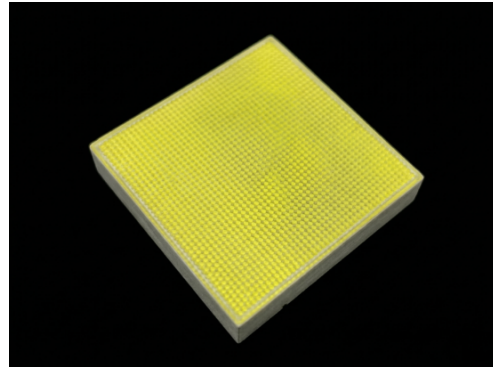


SCINTILLATOR ARRAYS

GAGG(Ce) Array

Product Brochure & Technical Reference

GAGG(Ce) scintillator arrays for pixel-level radiation detection and imaging. Define the pixel geometry, final pitch, reflector, readout face and photosensor arrangement.



Reference product image. Shown geometry is illustrative.

Material reference properties / options

Item	Typical Options
Array type	Linear array, 2D pixelated array, offset array, or customized detector layout
Linear array examples	1×8, 1×16, 1×32, 1×64, or customized layouts
2D array examples	8×8, 16×16, 64×64, or customized layouts
Minimum pixel size	Down to 0.2 x 0.2 mm when geometry and yield allow
Reflector materials	BaSO ₄ , ESR, E60, TiO ₂ , Teflon / PTFE, or custom reflector
Surface finish	Polished, roughened, painted, or application-specific finish
Readout matching	SiPM array, PSPMT, photodiode, CCD / CMOS coupling, or custom readout

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

SCINTILLATOR ARRAYS

Configuration & quotation

Define the component around your application

Application examples: Gamma-ray detection and imaging modules; X-ray medical imaging and CT detector research; Security inspection and radiation imaging systems

GAGG(Ce) Array Specifications

Reflector Material	Typical Reflector + Adhesive Thickness
BaSO ₄	Greater than or equal to 0.1 mm
ESR	Approx. 0.08 mm
E60	Approx. 0.075 mm
TiO ₂	Greater than or equal to 0.1 mm

GAGG(Ce) Array Specifications

Type	Listed light yield (photons/MeV)	Decay Time	Afterglow	Listed energy resolution with ¹³⁷ Cs (%)
High light output type	54,000	<150 ns	<=0.10% @ 20 ms	6
Low afterglow type	45,000	<70 ns	<=0.02% @ 20 ms	6
Fast decay time type	30,000	<50 ns	<=0.10% @ 20 ms	7
Balanced type	42,000	<90 ns	<=0.10% @ 20 ms	6

GAGG(Ce) Array Specifications

Parameter	Typical Value
Emission peak wavelength	520 nm
Refractive index at peak wavelength	1.9
Density	6.6 g/cm ³
Energy resolution with 137Cs	Approx. 6-7%, depending on material type and test condition
Radiation hardness	10 ⁵ rad
Crystal structure	Cubic garnet structure
Cleavage plane	No
Hygroscopicity	Non-hygroscopic
Mohs hardness	8

Prepare your quotation

RFQ input	Information to provide
Pixel geometry	Provide pixel cross-section, length, count, pitch, layout and finished envelope.
Optical construction	Specify reflector or separator, coupling face, surface finish and bonding requirements.
Readout / acceptance	Give the sensor model or interface and define the required test and acceptance method.
Order details	Provide quantity, drawing, intended application and delivery requirements.

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