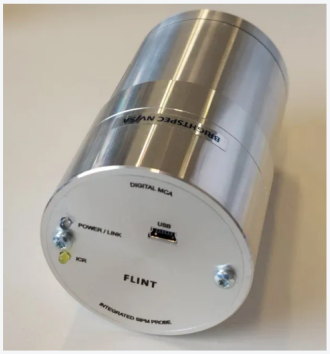
BRIGHTSPEC

Flint USB

Integrated gamma probe: SiPM scintillation detector and digital MCA in one housing

New series of integrated probes in which a SiPM-based scintillation detector, a temperature-stabilised bias supply and a full digital MCA share one housing. The probe connects to the PC by USB, which also powers it. The standard crystal is NaI(Tl), 2 × 2 or 3 × 3 inches, and other scintillators can be ordered.



Detector type

Scintillator with SiPM; standard round NaI(Tl), 2 × 2 or 3 × 3 in; can be ordered with CsI(Tl), $CeBr_3$, $LaBr_3(Ce)$, LBC or SrI_2 [1]

Spectrum channels

256, 512, 1,024, 2,048 or 4,096, 32-bit depth per channel [1]

Specifications

DETECTOR

Detector type	Scintillator with SiPM; standard round NaI(Tl), 2 × 2 or 3 × 3 in; can be ordered with CsI(Tl), $CeBr_3$, $LaBr_3(Ce)$, LBC or SrI_2	[1]

PERFORMANCE

Energy resolution at 662 keV	Typically better than 7.6% (^{137}Cs)	[1]
Low-energy noise level	Below 15 keV	[1]

ELECTRONICS & SIGNAL

Spectrum channels	256, 512, 1,024, 2,048 or 4,096, 32-bit depth per channel	[1]
Gain	×1–×16	[2]
SiPM bias	Generated internally, typically +6 to 16 V, stabilised against temperature changes	[1]
Digital filter rise time	0.1–12 µs in 0.2 µs steps; flat top 0.1–8.0 µs in 0.1 µs steps (trapezoidal shaper)	[1]

CONNECTIVITY & INTERFACE

Communication	USB 2.0 (mini-B), 3 m cable included	[1]

POWER & BATTERY

Supply voltage	5 V from the PC's USB port	[1]

MECHANICAL

Dimensions	FLINT-NAI-2: ø57 × 96 mm; FLINT-NAI-3: ø82 × 121 mm (diameter × height)	[1]

ENVIRONMENT & RATINGS

perating temperature	−10 to +60 °C	[1]

ORDERING & ACCESSORIES

Ordering code	FLINT-NAI-2 (NaI(Tl), 2 × 2 in), FLINT-NAI-3 (3 × 3 in); the -PRO versions with a single bGamma licence	[1]

GENERAL

Acquisition modes	PHA (pulse height analysis) and MCS (multichannel scaling)	[2]

Sources

[1] FLINT technical specifications (V1.4, December 2025)
BrightSpec · datasheet · p. 2, Technical Specifications; p. 2, Ordering information; p. 2, Technical Specifications – Digital Settings (printed as µs; the PDF text layer has a symbol-font character in plac · checked 2026-10-16
https://www.brightspec.be/brightspec/downloads/Flint_Spec_V1.4.pdf

[2] Flint USB
BrightSpec · product-page · Product page – Main features · checked 2026-10-16
https://www.brightspec.be/brightspec/?q=node/59

Every value is taken from the manufacturer's own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer's published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.