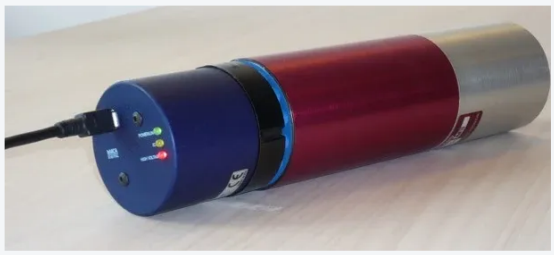
BRIGHTSPEC

bMCA-USB

Compact digital MCA built into the tube socket, for scintillation detectors

Digital multichannel analyser that fits directly into the photomultiplier's 14-pin tube socket and takes very little space. It performs pulse height analysis and multichannel scaling of the pulses from a scintillation detector and connects to the PC by USB, which also powers the device. Basic control and acquisition software is included; bGamma is available as an option.



Spectrum channels
256, 512, 1,024, 2,048 or 4,096 (PHA and MCS) [1]

Weight
Approx. 92 g [1]

Specifications

DETECTOR

Compatible detectors	Scintillation detectors with a standard 14-pin photomultiplier, e.g. NaI(Tl), $LaBr_3$(Ce), $LaCl_3$(Ce) and $CeBr_3$	[1]

ELECTRONICS & SIGNAL

Spectrum channels	256, 512, 1,024, 2,048 or 4,096 (PHA and MCS)	[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]
Detector high voltage	Built-in, 0 to +1,500 V in 4,096 steps	[1]

CONNECTIVITY & INTERFACE

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

POWER & BATTERY

Supply voltage	Via USB	[2]

MECHANICAL

Weight	Approx. 92 g	[1]
Dimensions (H × D)	52 × 56 mm (height × diameter)	[3]

ENVIRONMENT & RATINGS

perating temperature	–40 to +85 °C (industrial temperature range)	[1]

GENERAL

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

Sources

[1] bMCA-USB technical specifications (V2.0)
BrightSpec · datasheet · p. 1, Introduction; p. 2, Technical Specifications; p. 2, Technical Specifications – Digital Settings (printed as µsec; the PDF text layer has a symbol-font character in pl · checked 2026-10-16
https://www.brightspec.be/brightspec/downloads/bMCA_USB_Spec_V2.0.pdf

[2] bMCA-USB
BrightSpec · product-page · Product page – Main features; Product page – introduction · checked 2026-10-16
https://www.brightspec.be/brightspec/?q=node/11

[3] BrightSpec MCA Summary Table (V10, Nov 2024)
BrightSpec · catalog · MCA Summary Table V10 – Dimensions, column bMCA-U · checked 2026-10-16
https://www.brightspec.be/brightspec/downloads/BrightSpec_MCA_SummaryTable_V10b.pdf

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.