SCIONIX

Pen-Type Detector 9.5B20

Pen-type NaI(Tl) detector with electronics box (amplifier, SCA, high voltage)

Small probe with a 9.5 x 20 mm NaI(Tl) crystal and a pen-type photomultiplier tube, for activity measurements with small crystals, for example in sentinel node studies. The sealed electronics box holds a high-voltage generator, a shaping amplifier and a single-channel analyser with TTL output, and runs on +12 V.



Scintillator
NaI(Tl), 9.5 x 20 mm (other shapes on request) [1]

Energy resolution
< 8% FWHM at 662 keV; < 17% FWHM at 122 keV [1]

Power supply
+12 V, less than 300 mW [1]

Specifications

DETECTOR

Type number	9.5B20/0.4–E1–X plus electronics	[1]
Scintillator	NaI(Tl), 9.5 x 20 mm (other shapes on request)	[1]
Light sensor	Pen-type photomultiplier tube, Hamamatsu R1635 (10 mm diameter)	[1]

PERFORMANCE

Energy resolution	< 8% FWHM at 662 keV; < 17% FWHM at 122 keV	[1]

POWER & BATTERY

Power supply	+12 V, less than 300 mW	[1]

MECHANICAL

Detector housing	Aluminium; RG174 output cable, 1.5 m, with LEMO FFB 0S 403 CLAC32	[1]
Dimensions	112 x 31 x 62 mm	[1]

GENERAL

Electronics	Built-in shaping amplifier (0.63 µs, bipolar, max. +8 V), single-channel analyser with TTL output (1.5 µs) and high-voltage generator	[1]
SCA setting	LLD factory set to 20 keV, ULD maximum; adjustable with 20-turn potentiometers	[1]
Use	Activity measurement with small crystals, with or without a collimator, e.g. in sentinel node studies	[1]

Sources

[1] **Pen-type scintillation detector – data sheet**
Scionix · datasheet · p. 2; p. 1; pp. 1–2 · checked 2026-11-26
https://scionix.nl/wp-content/uploads/2017/07/Pen-type-detectors.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.