H3D

P Series (P100)

Collimated gamma imager

An imaging spectrometer that focuses on a weak source next to stronger gamma radiation.



Detector type
P100/P100S: CZT (CdZnTe) [1]

Spectroscopy energy range
P100/P100S: 50–3000 keV [2]

Weight
P100/P100S: 25 lb (approximately 11.3 kg) [1]

Specifications

DETECTOR

Detector type	P100/P100S: CZT (CdZnTe)	[1]
Detector volume	P100: >6 cm³; P100S: >4.5 cm³	[2]

PERFORMANCE

Energy resolution at 662 keV	≤1.1% FWHM (coincident interactions combined); ≤0.9% FWHM (separated)	[1]

MEASURING RANGE

Spectroscopy energy range	P100/P100S: 50–3000 keV	[2]
Imaging energy range	P100: 250–3000 keV; P100S: no imaging	[2]

CONNECTIVITY & INTERFACE

User interface	P100: tablet; P100S: tablet/webpage	[2]
Communication	P100: Wi-Fi, Bluetooth or wired tablet connection; Ethernet RJ45, TCP/IP	[1]

POWER & BATTERY

Battery life	P100/P100S: >7 hours at 23 °C; >3 hours at −20 °C or +50 °C	[1]
Power supply	P100: 100–240 V, 47–63 Hz	[1]

MECHANICAL

Weight	P100/P100S: 25 lb (approximately 11.3 kg)	[1]
Dimensions	P100: 22.6 × 12.4 × 16 cm	[1]

ENVIRONMENT & RATINGS

IP rating	P100/P100S: IP65 with fan replacement	[1]

GENERAL

Collimator	P100/P100S: 1 in (2.54 cm) tungsten, with removable plug	[3]

Sources

[1] P100 Directional Imaging Spectrometer – P100 Specifications (BZ-22)
H3D · datasheet · P100 sheet p. 2 'Crystal Volume'; p. 2 'Weight' (same in P100S sheet); p. 2 'Battery Life' – identical in the P100 and P100S sheets · checked 2026-10-16
https://h3dgamma.com/P100Specs.pdf

[2] P Series – Collimated Gamma-Ray Imaging Spectrometer
H3D · product-page · p100.php model table, row 'CZT Volume (cm3)' (columns P100, P100S); p100.php model table, row 'Spectrometer Range (keV)'; p100.php model table, row 'Imaging Range (keV)' · checked 2026-10-16
https://h3dgamma.com/p100.php

[3] P100S Collimated Spectrometer – P100S Specifications (SP-16)
H3D · datasheet · p. 2 'Collimator Thickness' – identical in the P100 (S13) and P100S (S14) sheets · checked 2026-10-16
https://h3dgamma.com/P100SSpecs.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.