H3D

S Series (S100)

Industrial spectrometer

A mountable gamma spectrometer for continuous isotope analysis and trending in industrial processes.



Detector type
S100/S400: CZT (CdZnTe) [1]

Spectroscopy energy range
S100/S400: 50–3000 keV; S100X/S400X: 50–9000 keV. X cannot be combined with the high-resolution option [1]

IP rating
S100: IP65 with fan replacement [1]

Specifications

DETECTOR

Detector type	S100/S400: CZT (CdZnTe)	[1]
Detector volume	S100/S100+/S100x: >4.5 cm³; S400/S400+/S400x: >19 cm³	[2]

MEASURING RANGE

Spectroscopy energy range	S100/S400: 50–3000 keV; S100X/S400X: 50–9000 keV. X cannot be combined with the high-resolution option	[1]
Imaging energy range	S100i/S400i (option): 250–3000 keV; base models without imaging	[1]

SOFTWARE & DATA

Software	Visualizer for post-processing (included); compatible with GammaTrend for networked isotope trending	[1]

CONNECTIVITY & INTERFACE

Communication	S100: Wi-Fi, Bluetooth or wired tablet connection; Ethernet RJ45, TCP/IP	[1]
User interface	S100: 8-inch tablet, 1280 × 800, or browser	[1]
Data storage	S100: removable USB storage, 64 GB included	[1]

POWER & BATTERY

Power supply	S100: 100–240 V, 47–63 Hz	[1]

MECHANICAL

Dimensions	S100: 21 × 9 × 15 cm	[1]
Weight	S100: 2.4 kg; with the high-efficiency option (S400): 2.5 kg	[1]

ENVIRONMENT & RATINGS

IP rating	S100: IP65 with fan replacement	[1]
perating temperature	S100: −20 to +50 °C	[1]

Sources

[1] **S100 Permanent-Mount Spectrometer – S100 Specifications (PM-22)**
H3D · datasheet · p. 2 'Crystal Volume' and box 'High-Efficiency Option (S400)'; p. 2 'Energy Range' and box 'High-Dynamic-Range Option (S 100X, S400X)'; p. 2 box 'Compton Imaging Option (S100i, S400i)' · checked 2026-10-16
https://h3dgamma.com/S100Specs.pdf

[2] **S Series – Permanent-Mount Spectrometer**
H3D · product-page · s100.php model table, row 'CZT Volume (cm3)' (columns S100, S100+, S100x, S400, S400+, S400x) · checked 2026-10-16
https://h3dgamma.com/s100.php

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.