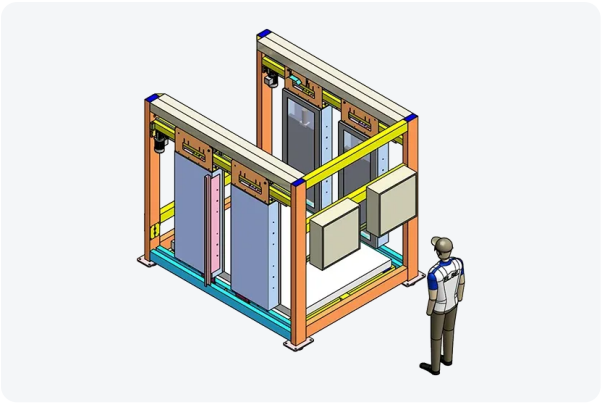
ELSE NUCLEAR

ARCHIMEDES III

Portal monitor for excavation materials in boxes and containers

Portal monitor that measures the radioactivity level of excavation materials of various kinds. Two pairs of large plastic scintillators on the sides give a wide measurement area, and the open top makes it easy to place boxes and containers on the platform scale. The detector positions are set via PLC from the box's standard dimensions, and the background is measured and subtracted automatically.



Detector type
Four plastic scintillators 100 × 50 × 5 cm [2]

Active area
5000 cm² per detector; two pairs mounted on the sides of the portal [1]

Energy range
35 keV–2 MeV [2]

Specifications

Use	Measuring the radioactivity level of excavation materials of various kinds in boxes and containers	[1]
Detector type	Four plastic scintillators 100 × 50 × 5 cm	[2]
Active area	5000 cm² per detector; two pairs mounted on the sides of the portal	[1]
Energy range	35 keV–2 MeV	[2]
MDA	5 Bq/g for ^{137}Cs (10 min)	[1]
Scale	Platform scale, max. 5,000 kg, resolution 1 kg	[2]
Software	Background measured continuously and subtracted; the software positions the detectors via PLC from the box dimensions, records the weight and analyses and archives the data (shareable via LAN)	[2]
Construction	Portal with an open top so boxes and containers are easy to place on the platform; standard box dimensions stored in the database	[1]

Sources

[1] **ARCHIMEDES III Radiation Portal Monitor for Excavation Materials**
ELSE NUCLEAR · product-page · Product page · checked 2026-10-16
https://www.elsenuclear.com/portfolio/archimedes-iii/

[2] **ARCHIMEDES III Radiation Portal Monitor for Excavation Materials (datasheet)**
ELSE NUCLEAR · datasheet · p. 2, Technical Specifications; p. 1–2 · checked 2026-10-16
https://www.elsenuclear.com/wp-content/uploads/2025/05/DAT_ARCHIMEDESIII_EN_1.05.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.