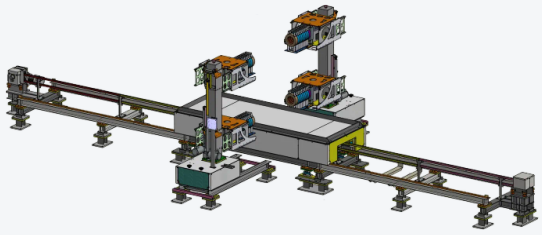
ELSE NUCLEAR

AURAS 3000

Free-release assay of large waste containers with up to four HPGe

Automated system that scans and characterises waste in bags, boxes, drums and B25 containers for free release. Up to four HPGe detectors on two movable towers measure the container in sub-sections while a heavy-duty platform moves it through the measurement area. The software reports activity, MDA and a release index per nuclide against customisable limits, and adds hard-to-measure nuclides via scaling factors.



Energy range
HPGe: 30 keV–7 MeV [1]

Energy resolution at 1.33 MeV
HPGe: ≤2.3 keV FWHM for ⁶⁰Co (1332.5 keV) [1]

Relative efficiency
15–150% (nitrogen-cooled), 50–150% (electro-cooled) [1]

Specifications

DETECTOR

Detector type	Up to four electro- or nitrogen-cooled HPGe detectors on two movable towers (up to two each)	[1]
Detector positioning	Height set automatically with 1 mm resolution by container size; towers positioned manually at the recommended distance	[1]

PERFORMANCE

Energy resolution at 1.33 MeV	HPGe: ≤2.3 keV FWHM for ⁶⁰Co (1332.5 keV)	[1]
Relative efficiency	15–150% (nitrogen-cooled), 50–150% (electro-cooled)	[1]

MEASURING RANGE

Energy range	HPGe: 30 keV–7 MeV	[1]

COOLING

Cooling	Stirling or nitrogen cooler; hardened cryostats that can be temperature cycled at any time and restart automatically after power loss	[1]
Load capacity	Containers up to 3 m³ (B-25 ISO), max. 3,000 kg; weighing system with 1 kg resolution	[1]

SOFTWARE & DATA

Software	Release index per nuclide against customisable limit tables; scaling factors add low or non-gamma-emitting nuclides; final report with hot spots	[1]

MECHANICAL

Dimensions	Typically 8.8 × 5.5 × 2.5 m (L × W × H)	[1]
Total weight	Typically 5,000 kg	[1]

GENERAL

Use	Scanning and characterisation of waste in bags, boxes, drums and B25 containers (density 100–2000 kg/m³) for free release	[1]
MDA	0.0037 Bq/g for ^{137}Cs (40 min)	[2]
Results	Spectra per detector and position, container activity per detector and averaged, hot spots and MDA values	[2]

Sources

[1] **AURAS 3000 Free Release Waste Assay Counter (datasheet)**
ELSE NUCLEAR · datasheet · p. 1; p. 2, HPGe specifications; p. 2, Detection equipment · checked 2026-10-16
https://www.elsenuclear.com/wp-content/uploads/2025/05/DAT_AURAS_EN_2.06.pdf

[2] **AURAS 3000 Free Release Waste Assay Counter**
ELSE NUCLEAR · product-page · Product page · checked 2026-10-16
https://www.elsenuclear.com/portfolio/auras/

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.