

4103Bo-AMS multi-element



The 4103Bo-AMS system is a high precision instrument for ^3H , ^{14}C , ^{10}Be , ^{26}Al , ^{41}Ca , ^{129}I and actinide analysis.

Features

- Source embodiment at ground potential ensures safe and easy operation.
- One source for both solid and CO_2 gas samples.
- Samples stored in a carousel and transported to the source interior upon use to avoid sample cross-contamination.
- Interchangeable with 50 or 200 sample carousel.
- Vacuum insulated accelerator: no use of SF_6 .
- Accelerator with internal power supply avoids vulnerable HV cable interfacing.
- Sophisticated X-ray suppression system.
- Fast 100Hz bouncer cycling frequency for virtual DC operation.
- Automatic start-up & shut-down and automated tuning, system control & monitoring as well as on-line data analysis.
- Unattended measurements of all samples in any pre-defined sequence.
- Fits in a single standard laboratory room.
- Quick and straight forward installation.

HIGH VOLTAGE ENGINEERING

Particle Accelerators Systems for the scientific, educational and industrial research communities



HIGH VOLTAGE ENGINEERING EUROPA B.V.

Amsterdamseweg 63, 3812 RR Amersfoort, P.O. Box 99, 3800 AB Amersfoort, The Netherlands

Phone: +31 33 4619741 Fax: +31 33 4615291 E-mail: info@highvolteng.com Web: www.highvolteng.com



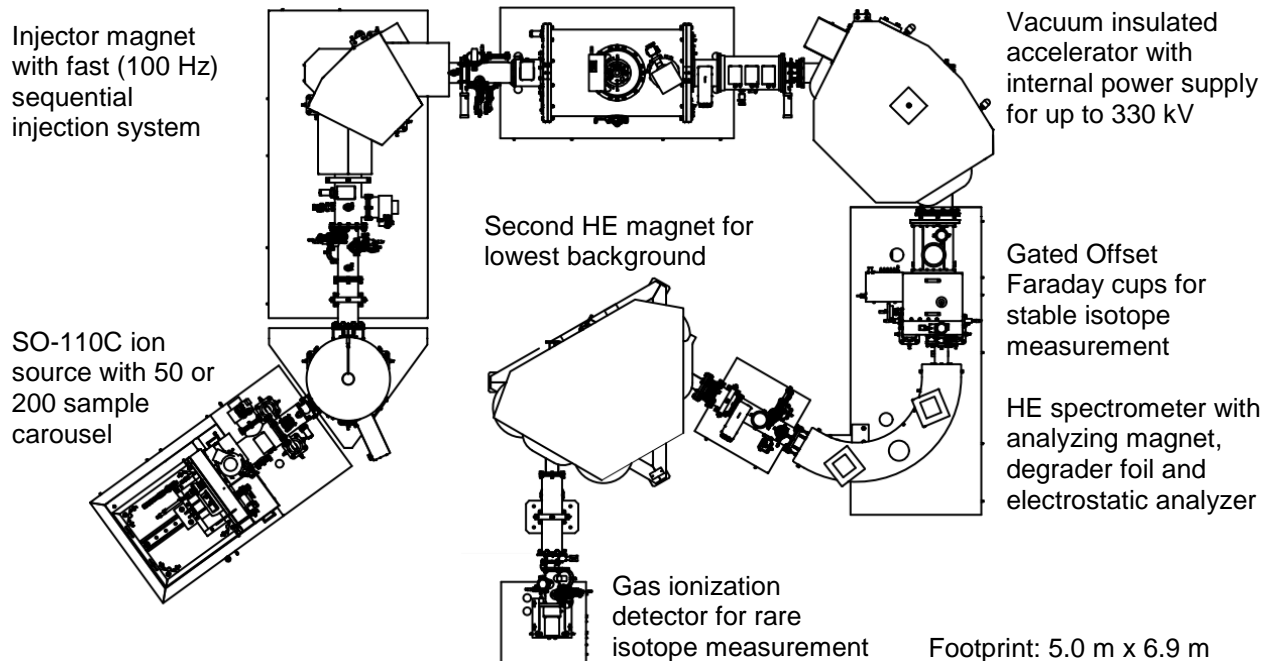
SPECIFICATIONS

AMS analysis

- Precision and background:

Element	Isotope ratio	Background	Precision	at ratio
Hydrogen	$^3\text{H}/^1\text{H}$	1×10^{-15}	5 %	$\sim 10^{-13}$
Solid Graphite	$^{14}\text{C}/^{12}\text{C}$	1×10^{-15}	0.3%	$\sim 10^{-12}$
	$^{13}\text{C}/^{12}\text{C}$		0.2%	
CO ₂ gas	$^{14}\text{C}/^{12}\text{C}$	1×10^{-14}	0.5%	$\sim 10^{-12}$
	$^{13}\text{C}/^{12}\text{C}$		0.3%	
Beryllium	$^{10}\text{Be}/^9\text{Be}$	5×10^{-15}	3 %	$\sim 10^{-12}$
Aluminium	$^{26}\text{Al}/^{27}\text{Al}$	5×10^{-15}	3 %	$\sim 10^{-11}$
Calcium	$^{41}\text{Ca}/^{40}\text{Ca}$	1×10^{-11}	3 %	$\sim 10^{-9}$
Iodine	$^{129}\text{I}/^{127}\text{I}$	4×10^{-14}	3 %	$\sim 10^{-11}$
Uranium	$^{236}\text{U}/^{238}\text{U}$	5×10^{-13}		

Layout



Sales offices in Europe and Japan

4103Bo-AMS 004

HIGH VOLTAGE ENGINEERING EUROPA B.V. reserves the right to change specifications and features without prior notice unless part of a quotation or order.

