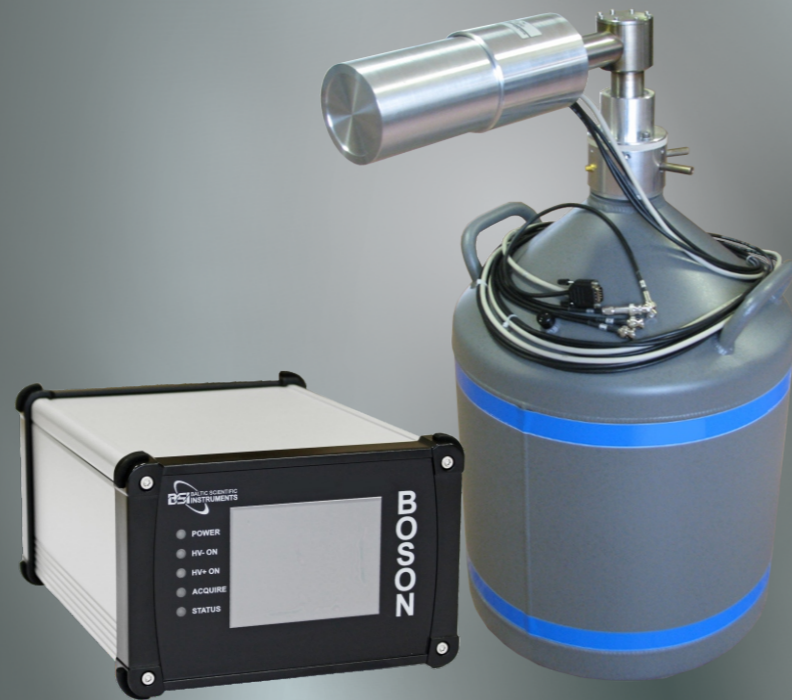


Specification



P-type HPGe Coaxial Detectors GCDX (with extended energy range)

Model	Relative Efficiency, %	Energy resolution			Peak/Compton ratio	Peak Shape	
		5.9 keV, (eV)	122 keV, (eV)	1.33 MeV, (keV)		FW.1M FWHM	FW.02M FWHM
GCDX - 10 175	10	400	720	1.75	41:1	1.9	2.65
GCDX - 15 180	15	450	740	1.80	46:1	1.9	2.65
GCDX - 20 180	20	460	760	1.80	51:1	1.9	2.65
GCDX - 25 185	25	480	775	1.85	55:1	1.9	2.65
GCDX - 30 185	30	500	800	1.85	58:1	1.9	2.65
GCDX - 35 190	35	550	830	1.90	60:1	1.9	2.65
GCDX - 40 190	40	600	850	1.90	62:1	1.9	2.65
GCDX - 50 190	50	620	875	1.90	64:1	1.9	2.65
GCDX - 60 200	60	670	900	2.00	68:1	2.0	3.00
GCDX - 70 200	70	700	950	2.00	73:1	2.0	3.00
GCDX - 80 210	80	750	950	2.10	77:1	2.0	3.00
GCDX - 100 210	100*	800	1000	2.10	81:1	2.0	3.00

* Detectors with other relative efficiencies are available

Energy range:
3 keV - 10 MeV with Be input window
5 keV - 10 MeV with carbon fiber input window

Advantages

- HPGe detectors with extended energy range GCDX provide outstanding performance not only as regular coaxial detectors but also allowing to go lower in energy range down to 3 keV.
- Thin contact structure of the HPGe detector accompanying with input window made of Beryllium or Carbon fiber guarantee low energy photon transition to the HPGe crystal and its registration.
- Input window of the detector is integrated into the end cap of the detector by using high-tech vacuum-tight materials

Application

Detection of Gamma-rays in nuclear energetics and environmental control, in industry and scientific research, in medicine and other applications.

Complete set (standard)

- HPGe coaxial detector
- Preamplifier with cooled input stage
- Dewar vessel
- Cable set
- Documentation

Accessories (optional)

- Multichannel Analyzer
- Analytical Software packages:
 - quantitative and qualitative analysis
 - γ -spectra modeling & efficiency registration calculation for complex geometry objects
 - extended radionuclide library
- Liquid nitrogen storage and filling system
- Liquid nitrogen sensor and monitor
- Cable set extension

Features

- 10% - 100% and higher efficiency HPGe coaxial detectors are available
- **Extended energy range 3 keV - 10 MeV**
- Input window materials: Aluminum, Beryllium or Carbon-fiber
- Built-in or Remote Preamplifier types are available depending on application
- Low instrument background
- High energy rate up to 200000 MeV/s
- Excellent peak symmetry & high resolution
- HV supply protection if detector is warm
- High count rate indicator
- Variable cryostat design modifications

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