QUALITY ASSURANCE DATA SHEET
GMX SERIES GAMMA-X HPGe
(HIGH-PURITY GERMANIUM) COAXIAL PHOTON DETECTOR SYSTEM

MODEL AND SERIAL NUMBERS

Detector Model No. GMX-50220-S

Cryostat Configuration SV-83

Dewar Model —

Preamplifier Model A257N

Preamplifier S/N 13143936

H.V. Filter Model 138ENI

H.V. Filter S/N 1315-7886

Smart-1-N —

IMPORTANT REFERENCE DATA

Ship Date 8-7-13

Serial No. 24-N1297

When calling Customer Service, always reference this Detector Serial No.

Dewar Capacity — Static Holding Time — Detector Cool-Down Time 6 hrs.

DIMENSIONS

Detector Diameter 64.9 mm

Detector Length 57.8 mm

End Cap to Detector 4 mm

ABSORBING LAYERS

Beryllium 0.50 mm

Aluminum — mm

Inactive Germanium – 0.3 μm

Recommended Operating Bias, NEGATIVE 4000 V

PERFORMANCE SPECIFICATIONS*

	Warranted	Measured	Amplifier Time Constant
Resolution (FWHM) at 1.33 MeV, ^{60}Co	2.42 keV	2.26 keV	6 μs
Peak-to-Compton Ratio, ^{60}Co	46:1	55:1	6 μs
Relative Efficiency at 1.33 MeV, ^{60}Co	45.0 %	46.8 %	6 μs
Peak Shape (FWTM/FWHM), ^{60}Co	2.00	1.91	6 μs
Peak Shape (FWFM/FWHM), ^{60}Co		2.62	6 μs
Resolution (FWHM) at 5.9 keV, ^{55}Fe	— eV	697 eV	6 μs

*Measured at a nominal rate of 1000 counts/s unless otherwise specified.

Other: _____

Data Certified by: BJ Wilson Date: 8-6-13

9.4
48.6