QUALITY ASSURANCE DATA SHEET

GMX Series HPGe GAMMA-X HPGE
(High-Purity Germanium) Coaxial Photon Detector System

Model and Serial Numbers

Detector Model No. GMX-50230-PLUS-S

Cryostat Configuration CG-GMX-A-5

Dewar Model 3.06

Preamplifier Model 232N

Preamplifier S/N 213

H. V. Filter Model 138

H. V. Filter S/N 9918

Important Reference Data

Ship Date 9-17-99

Serial No. 39-N31297A

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

Cryogenic Information

Dewar Capacity 3 l Static Holding Time 48 hrs. Detector Cool-Down Time 8 hrs.

Dimensions

Crystal Diameter 65.1 mm

Crystal Length 80.2 mm

End Cap to Crystal 4 mm

Total Active Volume — cc

Absorbing Layers

Beryllium — mm

Aluminum 0.5 mm

Inactive Germanium 0.3 mm

High Voltage Bias

Recommended Operation Bias, NEGATIVE 4000 V

Performance Specifications*

	Warranted	Measured	Amplifier Time Constant
Resolution (FWHM) at 1.33 MeV, ^{60}Co	2.30 keV	1.84 keV	6 us
Peak-to-Compton Ratio, ^{60}Co	55	68.9	6 us
Relative Efficiency at 1.33 MeV, ^{60}Co	50 %	51.4 %	6 us
Peak Shape (FWTM/FWHM), ^{60}Co	2.00	1.85	6 us
Peak Shape (FWFM/FWHM), ^{60}Co	3.00	2.43	6 us
Resolution (FWHM) at 122 keV, ^{57}Co	— eV	— eV	
Resolution (FWHM) at 5.9 keV, ^{55}Fe	— eV	— eV	

Other

Data Certified By Peter Kelly Date 9-17-99