

**QUALITY ASSURANCE DATA SHEET**  
**GMX Series GAMMA-X HPGe**  
**(High-Purity Germanium) Coaxial Photon Detector System**

**Model and Serial Numbers**

Detector Model No. GMX30P  
 Cryostat Configuration Pop Top  
 Dewar Model \_\_\_\_\_  
 Preamplifier Model A257N  
 Preamplifier S/N 128  
 H.V. Filter Model 138 EMI  
 H.V. Filter S/N 174

**Important Reference Data**

Ship Date 2-18-03  
 Serial No. 43-TN 315104  
 When calling Customer Service, always  
 reference this Detector Serial No.

**Cryogenic Information**

Dewar Capacity - Static Holding Time - Detector Cool-Down Time -

**Dimensions**

Crystal Diameter 58.7 mm  
 Crystal Length 59.9 mm  
 End Cap to Crystal 3 mm

**Absorbing Layers**

Beryllium 0.50 mm  
 Aluminium - mm  
 Inactive Germanium - 0.3  $\mu$ m

**High Voltage Bias**

Recommended Operating Bias, NEGATIVE 4200 V

**Performance Specifications\***

	Warranted	Measured	Amplifier Time Constant
Resolution (FWHM) at 1.33 MeV, <sup>60</sup> Co	<u>1.90</u> keV	<u>1.81</u> keV	<u>6</u> $\mu$ s
Peak-to-Compton Ratio, <sup>60</sup> Co	<u>52:1</u>	<u>58:1</u>	<u>6</u> $\mu$ s
Relative Efficiency at 1.33 MeV, <sup>60</sup> Co	<u>30</u> %	<u>35</u> %	<u>6</u> $\mu$ s
Peak Shape (FWTM/FWHM), <sup>60</sup> Co	<u>1.9</u>	<u>1.9</u>	<u>6</u> $\mu$ s
Peak Shape (FWFM/FWHM), <sup>60</sup> Co		<u>2.5</u>	<u>6</u> $\mu$ s
Resolution (FWHM) at 5.9 keV, <sup>55</sup> Fe	<u>787</u> eV	<u>709</u> eV	<u>6</u> $\mu$ s

Other: Capsule SCA # 6694  
Cryo cooler # 6795-021206-220 V

Data Certified by: Carol DePorter Date: 2-18-03

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