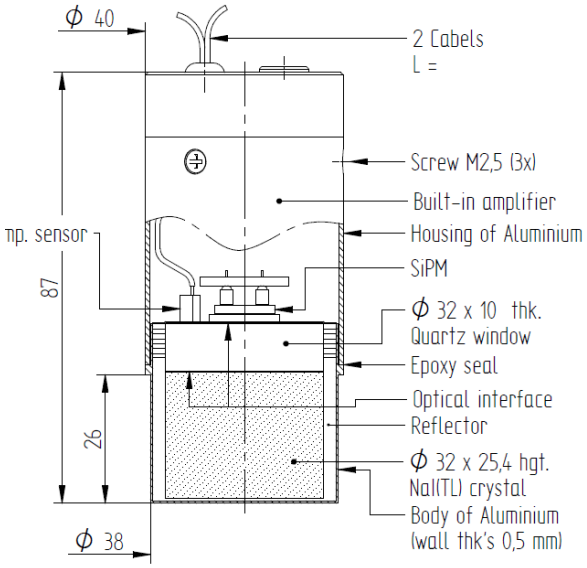
SCIONIX

Data Sheet

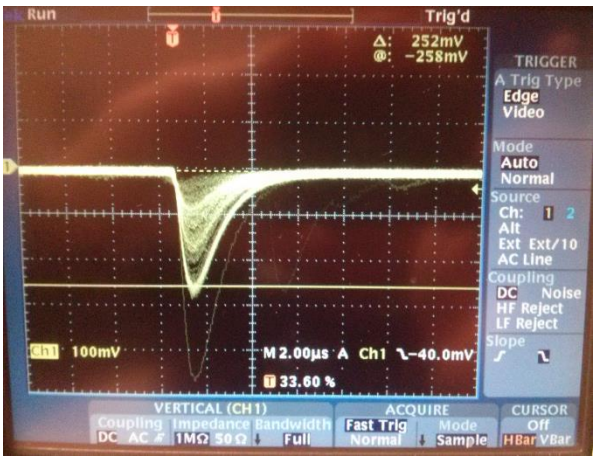
32B25.4/SIP-E3-T-X

NaI(Tl) / SiPm Scintillation detector with built-in temperature compensated bias generator and preamplifer

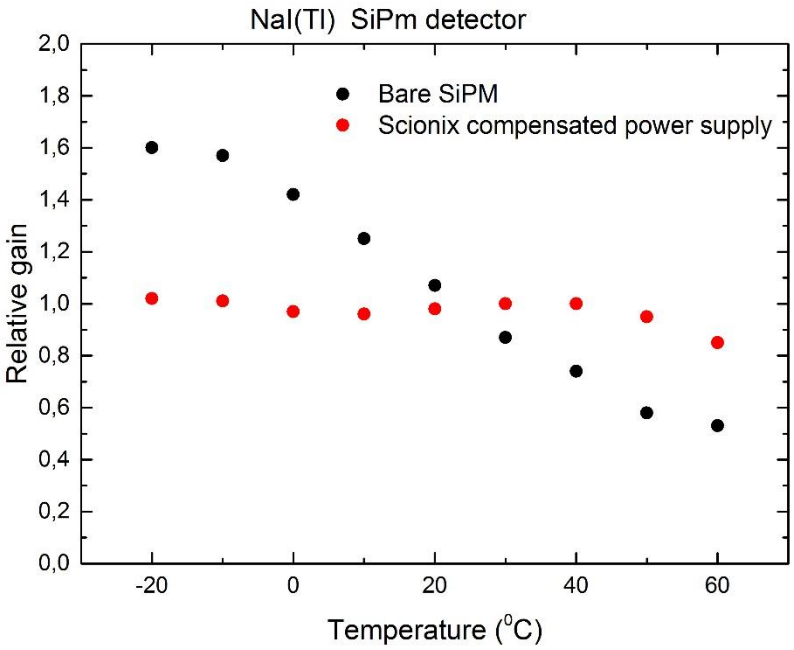


Scintillation material	:	NaI(Tl)
Drawing number	:	VS-1383-30
Crystal read out	:	12 x 12 mm^2 SiPm
Temperature sensor	:	AD592
Bias range	:	5.2 V – 16 V (25 mW)
Test bias voltage	:	26.9 V, internally generated by power supply
Electrical connections	:	LEMO ERA.0S.302.CLL Pin 1: power supply 5.2 – 16 V Pin 2: signal Grounding provided via mass of connector Red cable temp sensor: + 4 – 30 V Black cable temp sensor: ground

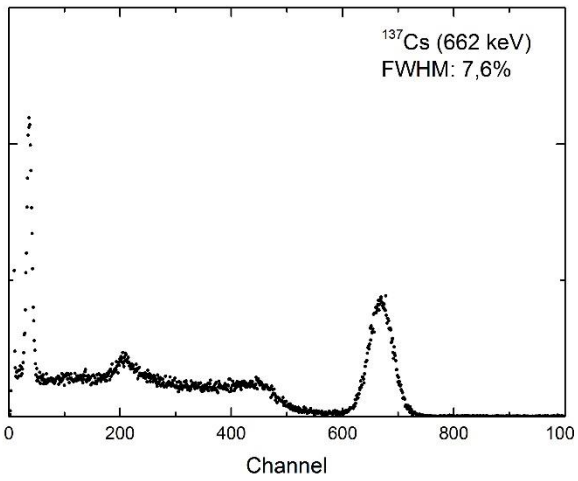
Preamplifier

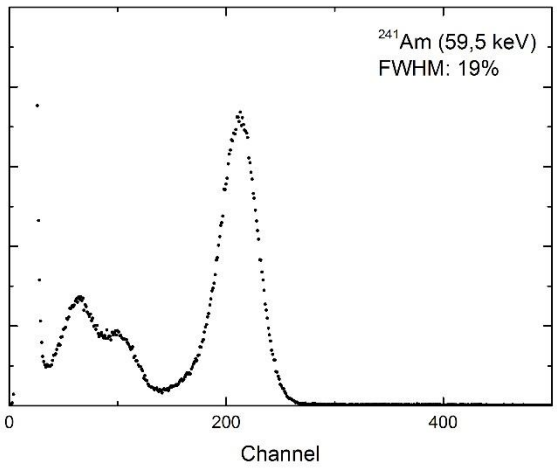


Output impedance	:	50 Ω
Maximum output voltage:		1 V
Pulse fall time (1/e)	:	1.5 µs
Pulse rise time	:	900 ns
Gain	:	380 mV / MeV
Energy resolution	:	< 8 % FWHM @ 662 keV
Noise level	:	< 10 keV

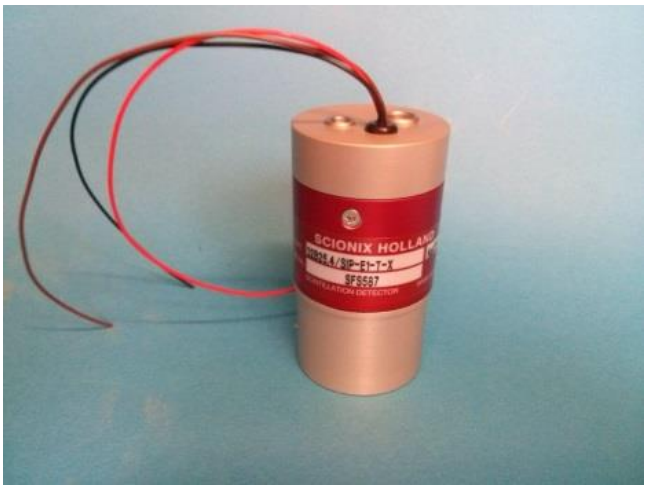


Detector gain versus temperature





Examples of pulse height spectra



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