Digital Signal Processor for Gamma-ray APV8002

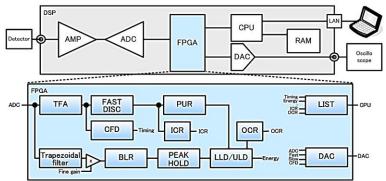
Gamma-ray spectrometer equipped with Digital Signal Processing (DSP) function. Output signal of HPGe detector preamp is processed by high speed ADC (100 MHz, 14-bit) and high-density FPGA. Analyzed data using histogram, event, and waveform applications is transferred to PC via Ethernet (TCP/IP or UDP). Application software is supplied as a standard accessory.

Features

 Energy resolution 	1.7 keV @ 1.33 MeV
 Time resolution 	0.625 ns (minimum unit)
 Output 	100 kcps and over
 Measurement mode 	Histogram, List, and Waveform
 Functions 	Spectroscopy Amp, Timing Filter Amp, CFD, and DAC for input & filtered output
Communication I/F	TCP/IP
 Options 	UDP Data Communication, Dual-CH Coincidence and Rise Time Measurement
• • • • • • • • • • •	Application software (Windows)

Accessories Application software (Windows) Instruction manual (Hardware / Software)

Block Diagram



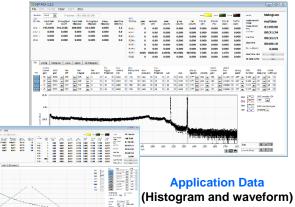
Specifications

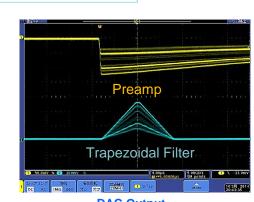
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Analog Input	2 channels, LEMO connector
Coarse Gain	x 2, x 4, x 10, x 20
Fine Gain	x 0.5 to x 1.5
ADC Input Signal	±1 V
Input Impedance	1 k ohm
Sampling Rate	100 Msps
Resolution	14-bit
ADC GAIN	8192, 4096, 2048, 1024, 512, 256 ch.
Trapezoidal Filter	0.4 to 16 μs (0.01 steps)
Digital Signal	Baseline Restorer, Pileup Rejecter,
Processing	CFD, etc.
External dimensions	Standard VME 6U
(Unit: mm)	20 (W) x 262 (H) x 187 (D)
Weight	About 0.40 kg



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VME





*Images is for illustration purpose.

*Please note that contents may change without prior notice.

Manufacture of Radiation and Radioactivity measurement devices



2976-15 Mawatari, Hitachinaka-shi, Ibaraki, 312-0012, Japan

☎ +81-29-350-8011
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