

APN101

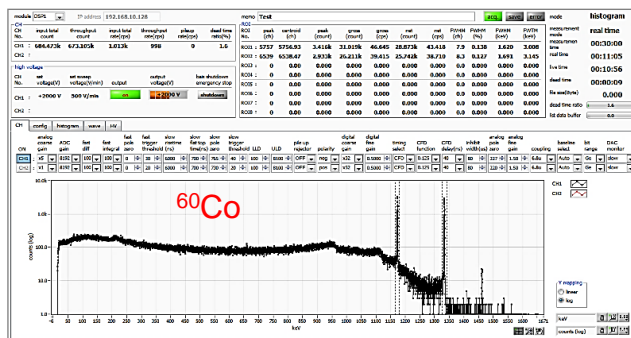
All-in-one digital spectrometer which has **Multi Channel Analyzer (MCA)**, **high-voltage power supply** and **preamplifier power supply**. Preamp signal of the detector is directly input to the module, and the digital signal processing is processed a high-speed ADC (100MHz, 14-bit) and highly-integrated FPGA. The measurement data will be transferred to the PC via Ethernet.

Features

Suitable Detectors	Semiconductor detector such as Ge, CdTe, Si etc. Scintillator detector such as LaBr₃(Ce), NaI(Tl), CsI(Tl) etc.
Energy Resolution	1.7 keV@1.33 MeV by HPGe detector 2.8 to 3.5 %@662 keV by LaBr₃(Ce) scintillator detector
Output	500 kcps or more
Measurement mode	Histogram, List, Wave
Multi-function	Spectroscopy amplifier Filter waveform output DAC

Specifications

Analog input	1 channel by LEMO connector, Range: $\pm 1V$, Input Impedance: 1 k Ω
Analog gain	Coarse Gain: x1, x4, x10, x20 Fine: x0.5 to x1.5
Sampling	100 Msps, Resolution: 14-bit
ADC Gain	16384, 8192, 4096, 2048, 1024, 512, 256 ch.
Digital Processing	Trapezoidal Filter: 0.1 to 16 μs , Baseline Restorer, Pileup Rejecter
HV power supply	0 V to ± 4000 V (Max: 1.0mA), Ripple: 20 mVp-p (typ.) *Customizable up to $\pm 5000V$ (Max.: 0.67mA) Bias shut down input terminal mounted
Preamplifier power supply	± 12 V, ± 24 V (NIM-Standard)
Communication I/F	Ethernet, TCP/IP
Power consumption	12V (0.8A)
Dimension Weight	NIM1 34(W) x 221(H) x 249(D) mm *without connector, Approx. 980g
Accessories	Cable set, (for signal, high voltage power supply, preamplifier power supply, LAN), AC power adapter



Histogram measurement

Sample programs can be downloaded from our website

Python

Linux

LabVIEW

Visual C++

Visual C#

*Images is for illustration purpose.

*Please note that contents may change without prior notice.



Manufacture of Radiation and Radioactivity measurement devices

TechnoAP Co., Ltd.

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

+81-29-350-8011

+81-29-352-9013

info@techno-ap.com