

Overview

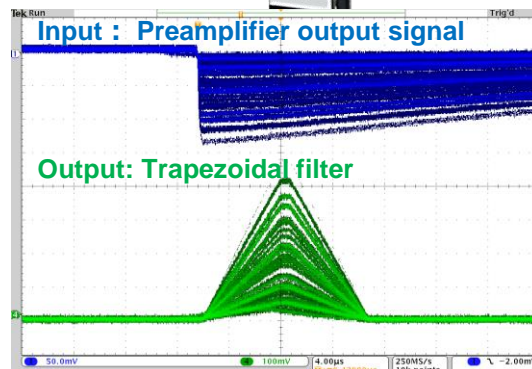
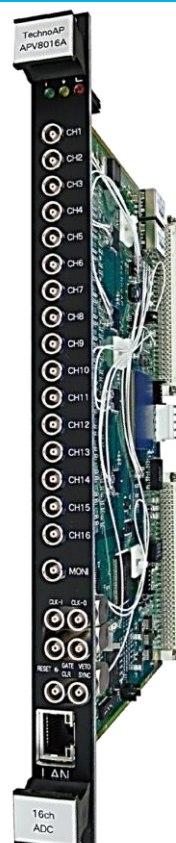
This is a radiation measurement board equipped with digital signal processing (DSP) function for gamma ray spectroscopy. The preamplifier signal of the germanium semiconductor detector is directly input to this board, and digital signal processing is performed with high-speed ADC (100 MHz, 16-bit) and high integrated FPGA. Using the latest FPGA, **the time precision has been improved 16 times** more than conventional products. Since Gigabit Ethernet is installed, it is possible to transfer a lot of list data. Even when using multiple boards, it can be measured while maintaining time accuracy, making it ideal for large scale systems.

Feature

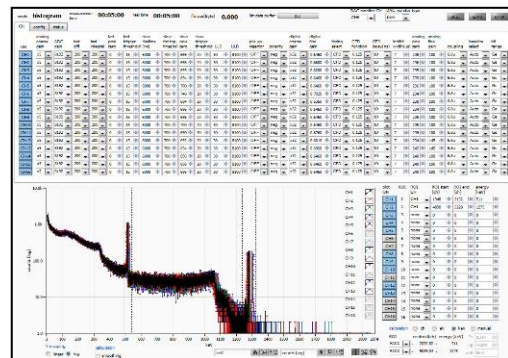
- Input: **16 channels simultaneous sampling**
- Energy Resolution: **1.70 keV @ 1.33 MeV**
- Time resolution: **39.062 ps (minimum unit)**
- Throughput: **100 kcps / ch. or more**
- Mode: **Histogram, List and Waveform**
Maximum transfer rate in list mode 1.5 Mcps (when 1 channel is used)
- Communication I / F: **TCP / IP, Gigabit Ethernet**
- Option: **Coincidence and Rise Wave**
- Accessories: With application and hardware / software manual

Specifications

Analog Input	16 channels with LEMO connectors Input impedance: 1kΩ
Course Gain	x1, x2, x5, x10
ADC	Input signal: ±2 V 100 MHz, Resolution: 16-bit
ADC GAIN	16k, 8k, 4K, 2K, 1K, 512, 256 ch.
Trapezoidal Filter	0.1 to 12 μs (0.01 steps)
Digital Signal Processing	Baseline Restorer, Pileup Rejecter, CFD etc. All parameters setting by PC
Terminals	Filtered wave output, CLOCK input, GATE input, VETO input, CLEAR input, 2 inputs for Expansion of functions, with LEMO connectors
Communication I/F	TCP/IP, Gigabit Ethernet
Dimension (Unit: mm)	VME 6U: 20(W) x262(H) x187(D) Unit: 300(W) x56(H) x335(D)
Weight	VME 6U: About 460g Unit: About3360g



Preamplifier output signal and trapezoidal filter (DAC output)



Application window (Histogram)



Standalone type can also be selected.

*Images is for illustration purpose.

*Please note that contents may change without prior notice.

