Multi Channel Analyzer (MCA)

TechnoAP

APV8208 | 8 channel | VME

Adopt **360ns successive approximation type ADC**.
Fixed conversion time (processing from peak detection to ADC conversion, memory rewriting, peak reset) is short, it can be used for high counting rate which can not be realized, multichannel nuclear experiment, synchrotron radiation experiment and so on.
Fast Pulse peak detection mode, conversion processing is performed after pulse peak is detected. Processing can be completed within the pulse until **0.25µs pulse shaping**. Very high throughput can be provided.
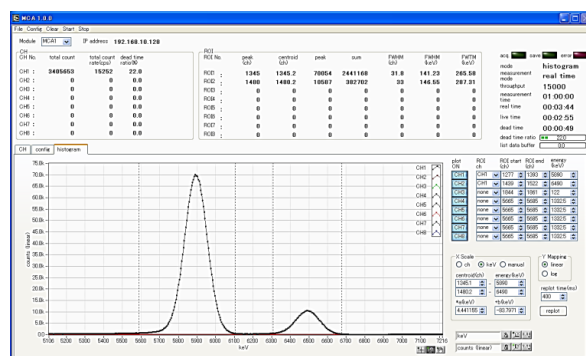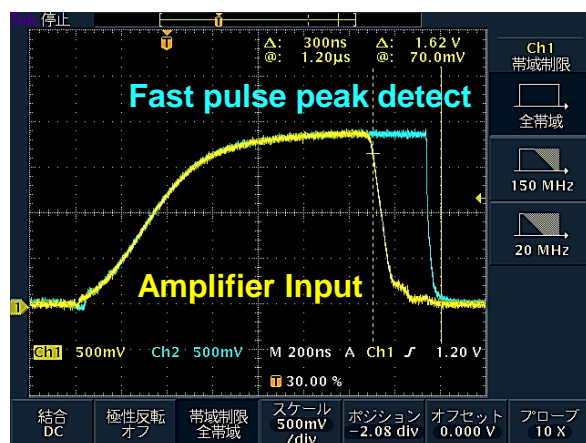This has a LIST mode that outputs timestamp and wave height information for each event. It is possible to **collect up to 160 Kcps** (per board) via Ethernet.

- THROUGHPUT: **130kcps or more** (High energy gamma ray)
  250kcps or more (Low energy X ray)
- RESOLUTION: **130eV @ MnKα (Si (Li) detector)**
- INTEGRAL NONLINEARITY: **±0.025% (typ.)**
- DIFFERENTIAL NONLINEARITY: **±1% (typ.)**
- GAIN DRIFT: **TDB**
- MODE: **Histogram and List**
  Max. transfer rate: 160 Kcps when 1CH is used
- COMMUNICATION I/F: **TCP/IP, UDP**

SPECIFICATIONS

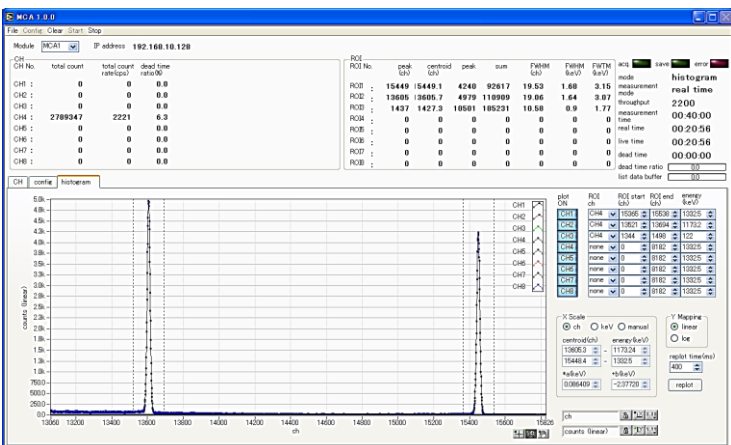|	
Analog Input	8CH
Input Range	0 - 10V pulse
Entrant Pulse Width	100ns (min.) - 100µs (max.)
ADC Gain	16K,8K, 4K, 2K, 1K, 512, 256ch
Fixed Dead Time	360ns
Peak Detect Mode	Fast pulse or Absolute pulse
Threshold	0-50% Full-scale from PC
ADC LLD	0-100% Full-scale from PC
ADC ULD	0-100% Full-scale from PC
ADC ZERO	0-2% Full-scale from panel VR
Real Time Preset	Day
Time base	40ns
Analysis Mode	Histogram / List
Interface	Ethernet
External Dimensions	VME6U 20(W) x 262(H) x 187(D)mm
Weight	VME6U about 410g
Operating Condition	Operating temperature 0 to 45 degrees

**Window of software
(Histogram and Waveform)**

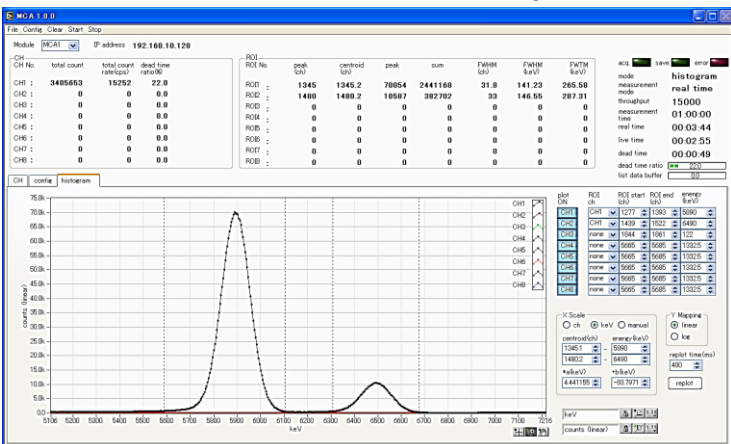*Images is for illustration purpose.
*Please note that contents may change without prior notice.

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APV8208   8 channel
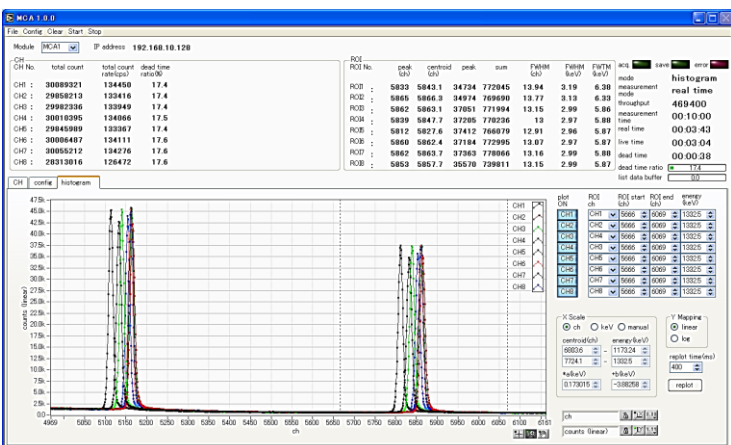
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VME

PERFORMANCE

HPGe Detector 1.68KeV@1.33MeV
*2Kcps 6μs Pulse Shaping

Multi SSD 141eV@5.9KeV
*15Kcps 3μs Pulse Shaping

HPGe Detector 3KeV@1.33MeV
Each channel 130Kcps throughput 1.5μs
Gated integrator shaping

ACCESSORIES

1. Instruction Manual
 (Hardware and Software)

*You can download the latest version on our HP.

2. Installer CD-ROM
(Windows version executable software)

Product rentals and demonstrations are available at any time!

* Photo shows a stand-alone type module

INSPECTION

We are testing and inspecting using Ge semiconductor detector and Si (Li) semiconductor detector owned by our company.

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