

APU201-G

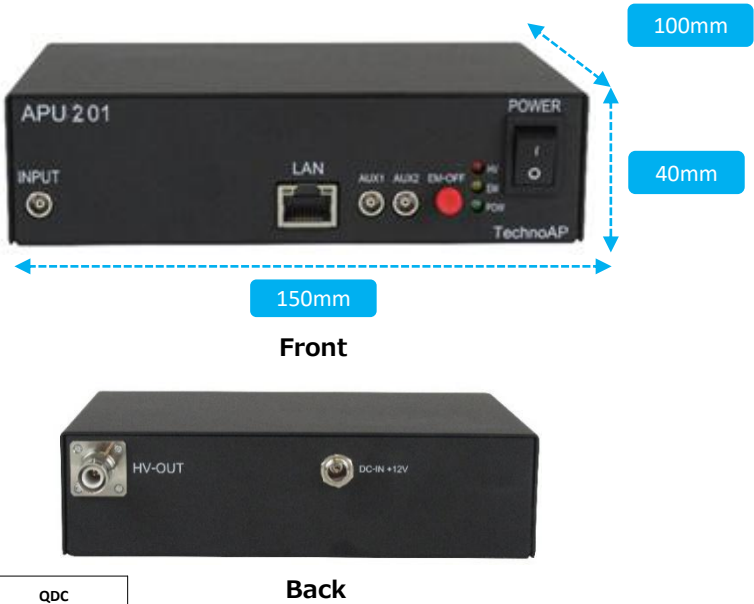
This is a lightweight, compact desktop-type digital pulse processor that integrates a digital pulse processor and a high-voltage power supply into a single unit.

It features a high-speed, high-resolution 1Gsp/s / 14-bit ADC. The system enables comprehensive analysis of signals from the anode output of a photomultiplier tube, including timing (CFD-TDC), energy (QDC), and pulse shape discrimination (PSD).

Data is transferred to a PC via Gigabit Ethernet, and list waveform data can be acquired for repeated

Features

Applicable Detector	Plastic scintillator, LaBr <sub>3</sub> (Ce), Digital pulses, etc.
Gain Switching	x0.5, x1.0, x1.5, x2.0, x2.5
Time Resolution	Coarse : 1ns   Fine : 3.9 ps LSB
Throughput	Over 2Mcps / Channels
Mode	Histogram ,LIST, Waveform
Option	LIST-WAVE Function, LIST-PILEUP-WAVE Function Pileup-Reject Function



LIST Data Example \*TDC: 1digit = 3.9ps

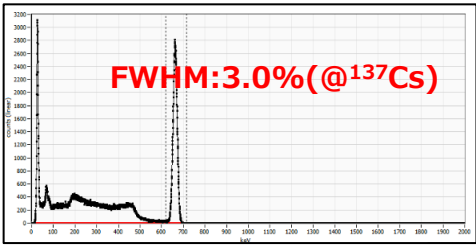
TOTAL [15..0]	FALL [15..0]	RISE [15..0]	TDC [53..0]	CH [3..0]	QDC [12..0]
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Sample List Waveform Data

List Data [127..0]	Wave Number [15..0]	Header [31..0]	Wave Data [15..0] × 波形点数分
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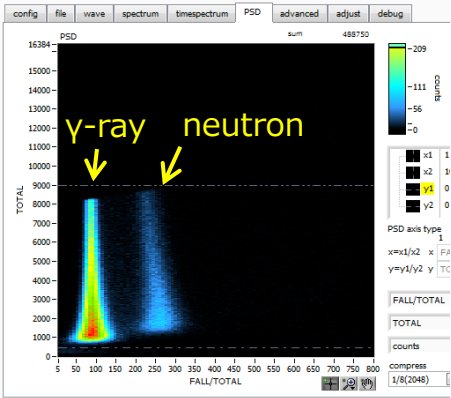
Specifications

Analog INPUT	1 Channel, LEMO connector Range ±1V, INPUT impedance 50Ω
Rise Time	Less than 2ns
Sampling	1Gsp/s, Resolution14bit
Digital Processing	CFD, TDC, QDC, PSD
High Voltage Power Supply	Max 4000V (1mA) SHV connector *Polarity depends on specifications.
External Connector	Two LEMO connectors for function expansion. *Functions can be customized according to specifications.
Communication	Gigabit Ethernet, TCP/IP and UDP
Power Consumption	12 V (0.8 A), powered by AC adapter
Dimensions Weight	150 (W) × 40 (H) × 100 (D) mm *excluding protrusions approximately 302 g
Accessories	Data Acquisition and Control Software



Histogram

In the case of a 1-inch LaBr<sub>3</sub>(Ce) scintillation detector



PSD capability, n-γ discrimination.

In the case of a stilbene scintillation detector (φ50.8 × 50.8 mm)

