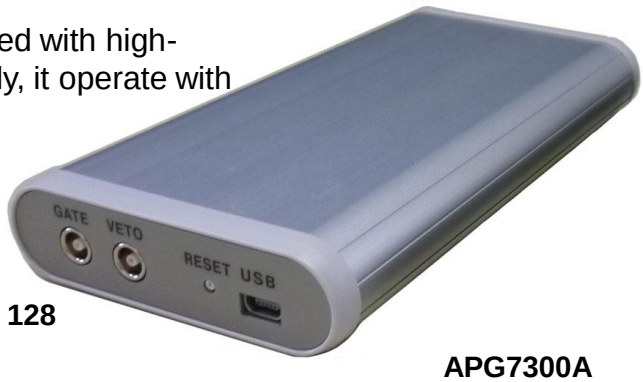
USB-MCA APG7300A

Compact MCA operation by USB bus power

JAPAN MADE
MCA
20190712

APG7300A is MCA of lightweight compact size equipped with high-speed successive-approximation type ADC. Additionally, it operate with USB bus power.



APG7300A

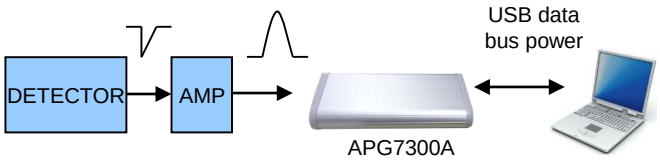
- Channel **1CH**
- Fixed dead time **500ns**
- Output **100kcps or more**
- ADC gain **16k, 8k, 4k, 2k, 1k, 512, 256, 128**
- Integral non-linearity **±0.025% (typ.)**
- Differential non-linearity **±1% (typ.)**
- Power **USB bus power (AC adapter is unnecessary)**
- Body **Lightweight compact aluminum case**
- Connection I/F **USB2.0 (16k spectra data is transferred inside a second.)**
- Software **Within driver & application**

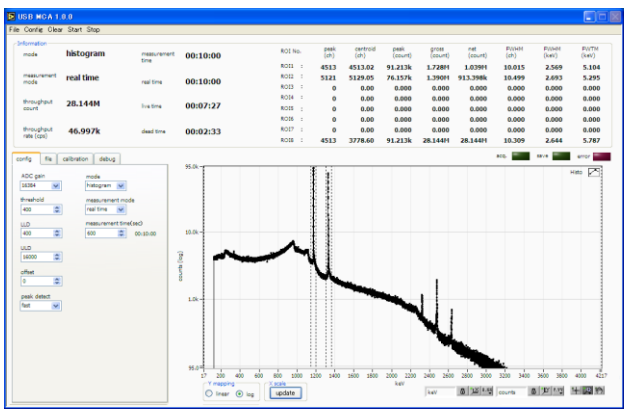
Specifications

Analog input	1CH (LEMO 00 series connector)
Input range	0 - 10V pulse
Input impedance	1kΩ
Entrant pulse width	100ns (min.) - 100μs (max.)
ADC gain	16k, 8k, 4k, 2k, 1k, 512, 256ch
Fixed dead time	500ns
Peak detection mode	Fast pulse / Absolute pulse
Output	100 kcps or more
Integral non-linearity	±0.025% and under
Differential non-linearity	±1% and under
Threshold	0 - 50% Full-scale from PC
ADC LLD	0 - 100% Full-scale from PC
ADC ULD	0 - 100% Full-scale from PC
External gate input	LEMO connector, TTL, Active High
External VETO input	LEMO connector, TTL, Active Low
LED	POWER, RUN, ACCEPT
Interface	USB 2.0, USB Mini-B receptacle 16k channel spectra data is transferred inside a second.
Power supply	USB bus power
OS	Windows 7, Vista, XP (32, 64bit)
Accessory	CD（driver, application）, USB cable
External dimensions	70(W) x 140(D) x 20(H)　(Unit: mm)
Weight	About 180g
Environmental condition	Operating temperature: 0 - 40℃, No dew condensation

Overview

APG7300A is a high-speed type multi channel analyzer (MCA) of small size equipped with latest successive-approximation type ADC. It is using a Nano second successive-approximation type ADC with fixed dead time 500ns (including from peak detection, ADC conversion, memory update, to peak reset).
In a new mode, “Fast Pulse Peak Detection Mode”, it started the conversion after detecting a pulse peak, and it is able to end the process until 0.25 μs pulse shaping within a pulse. Therefore, it can provide a very high throughput.
It is easy to carry because it operate only with USB bus power. AC adapter is not required.





Window of software

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

Website

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