

1. Product introduction



The EP-PDMCA1100U Digital Multi-Channel Pulse Amplitude Analyzer is a signal readout system for PMT scintillation detector spectrometers. Featuring a compact chassis design, it integrates a voltage divider, preamplifier, programmable gain amplifier, digital shaping filter, temperature acquisition and the necessary power supply unit. The use of digital waveform full sampling technique results in better energy spectrum characteristics. For different application scenarios, the EP-PDMCA1100U digital multichannel opens up all parameter setting interfaces, which can be dynamically adjusted during the energy spectrum measurement.

2. Functional indicators

- ▶ 1 Spectral resolution: 1024 to 4096 channels
- ▶ 2 Software-adjustable molding time, adjustable range: 0.2 ~ 12.8us
- ▶ 3 3 steps coarse gain can be adjusted, 0.5 ~ 1.5 times fine gain can be adjusted, system zero point can be adjusted
- ▶ 4 Digital back-stacking, digital gating, digital baseline recovery
- ▶ 5 With digital inverse Compton scattering/inverse cosmic ray interface
- ▶ 6 Temperature acquisition function, convenient for users to compensate the temperature of the probe
- ▶ 7 High voltage: 0V ~ 1100V DC, Step 1V
- ▶ 8 Stable and reliable for long time operation, zero drift less than 1 scale within 72 hours, gain instability less than two thousandths within 72 hours
- ▶ 9 Zero temperature coefficient: less than 0.2 scale /°C
- ▶ 10 Gain temperature coefficient: less than 0.1% /°C
- ▶ 11 Communication mode: serial port, 232, 485, 422, USB, etc
- ▶ 12 System throughput: 200Kcps
- ▶ 13 Dimensions: 63Φ×86L mm
- ▶ 14 Weight: <300g
- ▶ 15 Power supply: +5V, Power consumption <1.5W
- ▶ 16 One year free hardware warranty and lifetime free software upgrades
- ▶ 17 Open all software interfaces to facilitate user secondary development
- ▶ 18 Equipped with basic spectral analysis software: GammaSense