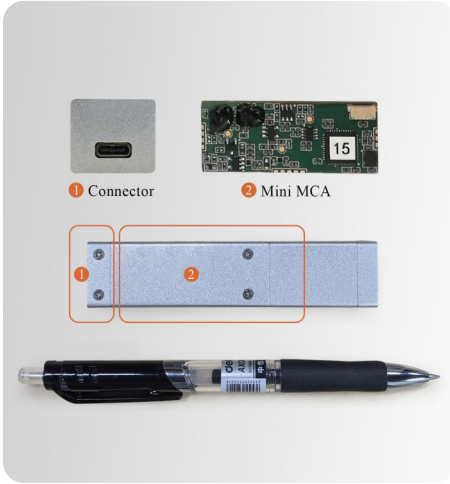


1. Product introduction



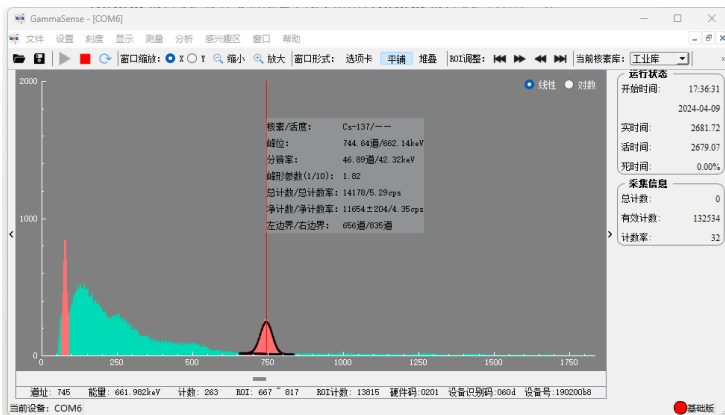
ESESD-CS01 is a compact and exquisitely designed multi-channel spectrometer, with dimensions similar to a large lipstick. This spectrometer incorporates the company's developed miniature multi-channel technology, and through advanced microelectronics, integrates the necessary nuclear electronics circuits into a single chip, significantly reducing the size of the equipment. This MINI spectrometer offers excellent performance, capable of handling up to 4096 channels of any signal input with exponential decay characteristics, all within a volume equivalent to that of a large lipstick. The original intention of the MINI spectrometer module development is to provide enterprises in the field of nuclear detection and measurement with an economical, low-power, and high-performance spectrometer solution, so that it can be easily integrated into more complex systems. Its communication protocol design is open and supports customization according to customer requirements.

2. Functional indicators

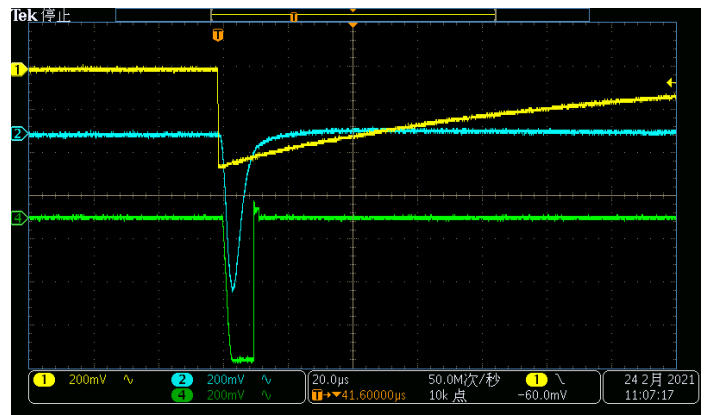
- ▶ 1 Compact, lightweight, and low power consumption
- ▶ 2 Equipped with continuous spectrum acquisition mode and LIST mode, LIST mode includes time and energy information
- ▶ 3 Receive input signals with exponential decay characteristics
- ▶ 4 Open communication interfaces allow for customization of software and hardware according to user needs

3. Performance testing

- Crystal Dimensions: L14×W14×H25mm, Other dimensions can be customized
- Spectral resolution: 512 to 4096 channels
- Hardware gain and shaping time software adjustable
- Long-term work is stable and reliable, with a zero drift of less than 1 division at 72 hours and a gain instability of less than two thousandths at 72 hours
- System throughput rate: 70Kcps
- Communication and power interface: Standard USB Type-C interface, other interfaces can be customized
- Power supply: DC +5V
- Power: <200mW
- Dimensions: ≤100mm×23mm×20mm
- Weight: 100g



● Measured energy spectrum



● Multiple measured waveforms, yellow: pre-amplifier signal input; blue: shaped signal output; green: peak sampling signal output.