

1. Product Introduction



The EP-EHVDC02 Preamplifier High-Low-Voltage Power Supply is a detector power-supply unit integrating a positive high-voltage source and dual-channel low-noise preamplifier power supplies. High-voltage parameters can be configured via physical keys or host-computer software, with high-voltage slew-rate control available. This product supplies high-voltage bias and preamplifier power for semiconductor detectors and various scintillator detection systems.

2. Functional Indicators

- ▶ 1 Integrates positive high-voltage power supply and dual-channel low-noise preamplifier power supplies
- ▶ 2 Positive high-voltage range: 0 V~+1000 V; preamplifier outputs: ± 12 V @100 mA max / ± 24 V @100 mA max
- ▶ 3 Preamplifier power-supply ripple: less than 3 mVpp; wide-range input voltage: +5 V ~ +12 V
- ▶ 4 High-voltage configurable via on-device keys or host-computer software; supports high-voltage slew-rate control
- ▶ 5 Equipped with OLED display, USB port, RS485 serial port and DB9 preamplifier power connector
- ▶ 6 Supports multi-device cascading over RS485. Host-computer functions include device ID configuration, high-voltage setting, high-voltage readback and broadcast operations

3. Application Scenarios

- ▶ 1 Bias high-voltage and preamplifier power supply for semiconductor detectors
- ▶ 2 Preamplifier and high-voltage power supply for various scintillator detection systems
- ▶ 3 Radiation detection and measurement systems requiring multi-device cascading and centralized high-voltage configuration & readback

4. Performance Parameters

- ▶ Positive High-Voltage Range 0 ~ +1000V
- ▶ Preamplifier Output Voltage ± 12 V@100mA max / ± 24 V@100mA max
- ▶ Preamplifier Power-Supply Ripple <3mVpp
- ▶ Wide-Range Input Voltage +5V ~ +12V

5. Practical Operation Test



- Status Display Interface of EP-EHVDC02 Preamplifier High-Low-Voltage Power Supply