PMT Tube Base Series



The EP tube base series is an integrated electronic module specifically designed for PMT (photomultiplier tube) light detectors or scintillation detectors composed of PMT and scintillators. The module is based on a 14-pin PMT socket (HPK: E678-14W) and can provide different configurations under the same form factor to meet various application requirements. Users can choose voltage dividers, preamplifiers, and built-in high voltage supplies according to their needs. With flexible mode configurations and easy operation, it can be used to quickly build various photon counting and nuclear radiation measurement systems when matched with corresponding PMT or scintillation detectors.

EPXXX	DIV	PREAMP	HV	PMT	OUT
Product model	Voltage Divider Selection	Preamplifier selection	HV Selection	PMT Model Selection	Output signal selection

Types of Voltage Dividers

- ${f P}$ Positive high-pressure mode, suitable for the majority of pulse mode measurements.
- N Negative high voltage mode, when using DC coupling in the module, requires the selection of a negative high voltage mode voltage divider.

(b) Type of preamplifier

- N Without front-end amplifier, suitable for situations where external front-end amplifier or built-in front-end amplifier in subsequent electronic systems are used
- C Charge-sensitive positive pulse output preamplifier, default pulse width 50us. If the customer requires a pulse width of 2us, please specify when placing the order
- V Voltage-sensitive negative pulse output preamplifier, default pulse width of 50us. If the customer requires a pulse width of 2us, please specify when placing the order.
- F Current-sensitive negative pulse fast front-end amplifier, with a 1.5ns rise time.
- D It includes two outputs, namely an anode current output and a voltage-sensitive preamplifier output, making it suitablefor applications that require both timing and amplitude discrimination simultaneously.

High voltage

- P Built-in positive high voltage, 30V~1500V & 1mA, with built-in potentiometer control and high voltage monitoring point. N Built-in negative high voltage, -30V~-1500V & 1mA, controlled by built-in potentiometer, including high voltage monitoring point
- E External High Voltage

PMT model

- 1 R6231/CR173
- 2 R6233/CR160
- 3 ET9266KB/CR105-05
- 5 R1307/CR119
- 6 Other designated models PMT

Output method

- A Communication Coupling Output
- D Direct current coupling output
- N Not applicable

Dimension and Weight

Instrument size(host): Ø60 mm × H75 mm Instrument weight(host): 0.2 kg

(Note: The output coupling method is only chosen when there is no amplifier and direct anode output. In cases where there is an amplifier, it is always a direct current-coupled output, selecting "N".)

Input and output interfaces

High voltage divider socket

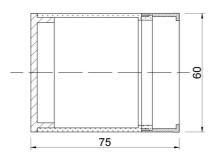


High Voltage Test Point (HV = Test Point Voltage × 300V) Signal Output: BNC 4 Adjusting potentiometer

Divider socket



Drawing



未装螺纹套的效果 单位Unit: mm

