

# Nuclear radiation sensor module

## MR-10-S/MR-10-J/MR-10-H

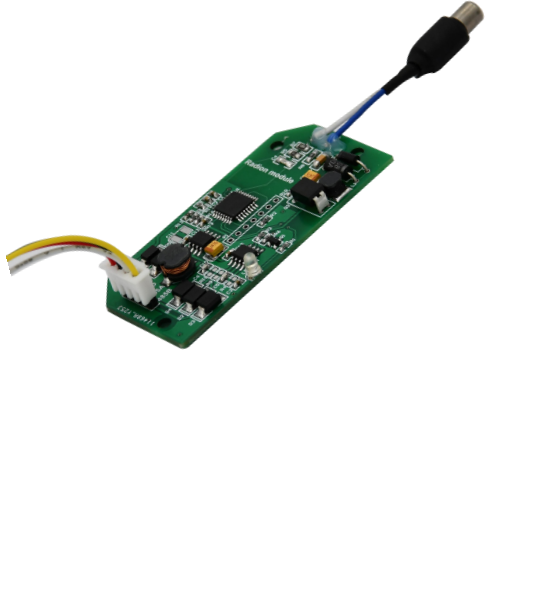
### 1. Product brief introduction

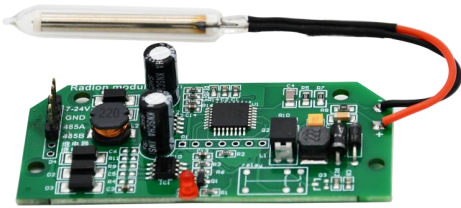

In Russia, a group of people often carry radiation alarm devices to explore the Chernobyl nuclear power plant, and the locals call them stalkers. MR-10 series radiation sensor module adopts domestic and foreign micro GM counters, The data is stable and reliable, and it can detect hard  $\beta$ ,  $\gamma$  and X rays in the environment or products in real time and quickly find radioactive sources. It is used for the integration of radiation devices such as personal dosimeter and radiation detector. It has been calibrated in the factory, and users can directly read data through RS485 digital communication protocol.

### 2. product application

1. Integration of personal dosimeter and radiation monitoring device
- 2, medical radiation protection monitoring
3. Monitoring and application of nuclear waste
4. Measurement and early warning of other radioactive substances.
5. Support customization and development of counter tubes with different specifications.

### 3. Technical index

MR-10-S (module)	<p>The types of measured rays: hard beta rays, gamma rays and X-rays Detector type: Metal Geiger counter (imported from Russia) Detector lifespan: <math>2 \times 10^{10}</math> Measurement range: 0.15uSv/h- 36,000 uSv/h Peak range: 0.1 to 1000 mR/sec Measurement accuracy: <math>\pm 15\% +6/p</math> Energy response range: gamma <math>\gamma</math> : 0.1-1.25Mev Beta: 0.25-3.5Mev X-ray: 0.03-3.0Mev Sensitivity Co60:450cpm/mR/h Operating temperature: -30°C to 60°C Working humidity: 5%-95%RH (No condensation) Data output: RS485 MODBUS-RTU Voltage: 7-30DCV Working current: &lt; 5mA</p>	
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<p>MR-10-J (module)</p>	<p>Types of measured rays: gamma rays and X-rays            Detector type: Geiger counter in metal and glass packaging            Detector lifespan: 1X10<sup>9</sup>            Measurement range: 0.01uSv/h- 100,000 uSv/h            Measurement accuracy: <math>\pm 15\% +8/p</math>            Energy response range: 50Kev- 1.5Mev            Operating temperature: -20℃ to 60℃            Working humidity: 5%-95%RH (No condensation)            Data output: RS485 MODBUS-RTU            Voltage: 7-30DCV            Working current: &lt; 5mA</p>	
<p>MR-10-H (module)</p>	<p>Types of measured rays: hard beta rays, gamma rays and X-rays            Detector type: Geiger counter in metal and glass packaging            Detector lifespan: 1X10<sup>9</sup>            Measurement range: 0.01uSv/h-50,000 USV /h            Measurement accuracy: <math>\pm 15\%</math>            Energy response range: 50Kev-1.5Mev            Operating temperature: -20℃ to 60℃            Working humidity: 5%-95%RH (No condensation)            Data output: RS485 MODBUS-RTU            Voltage: 7-30DCV            Working current: &lt; 5mA</p>	

Remark:Weight: Approximately 15g  
 Circuit board size:

