

1. Overview



EPHD23202 high temperature scintillation detector is a high temperature resistant scintillation detector for natural gamma counting logging. It integrates high temperature NaI (TI) crystal, high temperature PMT , high voltage power supply and voltage divider circuit. It can directly output TTL digital level. The unique design ensures the stable performance of the detector in high temperature logging environment. This product has the advantages of simple and convenient use, high reliability and not easy to damage. It is mainly used in natural gamma counting measurement in oil logging environment.

2. Specifications

▶ Detector diameter (mm)	.....	30
▶ Detector length (mm)	.....	341
▶ Scintillator size (mm)	.....	Φ23×120
▶ Input voltage (V)	.....	5±0.5
▶ Input current Max. (mA)	.....	100
▶ Output signal (Positive TTL)	.....	5V±0.5V, 5μs~10μs
▶ Natural gamma counting rate ²⁾ Min.(s ⁻¹)	.....	100
▶ High temperature and normal temperature counting rate deviation ³⁾ Max.	.....	5%
▶ Vibration	.....	5g rms, 50Hz~500Hz
▶ Shock	.....	100g, 11ms
▶ Operating temperature ⁴⁾ (°C)	.....	-30~150
▶ Storage temperature ⁴⁾ (°C)	.....	-30~70

- Tested in natural gamma environment

- Test environment: Specified test site (Detector Production Workshop of BHP)

- High temperature and normal temperature counting rate deviation = | Output counting rate at 25°C - Output counting rate at 175°C | / Output counting rate at 25°C × 100%

- Temperature change rate during detector operation and storage ≤ 3°C/min