

GF12

SMART PHOTOELECTRIC SCANNING HEAD

The GF12 smart photoelectric scanning head is suitable for scanning the marks of mechanical rotating disc meters or the detection of light emitting diodes (LED's) of electronic meters, and also as a manual switch. Three mode of operation is selectable via a switch. It has the characteristics of high-precision acquisition, high-frequency acquisition, wide range acquisition, and high sensitivity, and is suitable for on-site calibration instruments and calibration devices for electric energy meters. This product is compatible with devices adhering to the European standard IEC 62056-21 (IEC 1107) and IEC 62053-31, ANSI C12.10 .

Application

1. Electrical laboratory;
2. Metrological service center;
3. ISO17025 electrical laboratory;
4. R&D for next-gen smart metering systems;
5. Electricity power bureau & power company;
6. National Metrology and testing department;
7. Power engineering commissioning company;
8. Factory calibration of single/three-phase meters;
9. Current transformer and voltage transformer factory;
10. Field maintenance and regulatory compliance checks;
11. Electrical Department of industrial and mining enterprises;



Functions & Features

1. The sampling speed can reach up to 3kHz, fully meeting the sampling requirements of various electric meters;
2. Adopting a telescopic bracket design, suitable for various types of electric energy meters with different casings;
3. The "crosshair" is used for aiming, making it easy to adjust the position of the light and achieving high accuracy;
4. The photoelectric head has high sensitivity and strong adaptability, and can automatically adapt to changes in light intensity on site;
5. Three color LED status indicator, mechanical watch red light on, electronic watch green light on, manual switch orange light on, strong visibility;
6. Multiple connection methods, suitable for various indoor and outdoor occasions, such as electric meter inspection devices and on-site calibration instruments;
7. Integrating three working modes: electronic and mechanical meters, as well as manual switches, compatible with electronic meters and mechanical pulse acquisition, with one click switching;

Parameters

Electrical parameters	
Induction wavelength	400-1000nm
Pulse width	Not less than 0.2 milliseconds
Working voltage	3.3-12V, 3.3V, 5V, 12V DC
Working current	$\leq 13\text{mA}$
Sampling distance	0-45mm, affected by environmental light sources
Jack column	Yes
LED lamp	Red, green, orange
Key	1pc
Output signal (high)	$\geq 3.0\text{V}$
Output signal (low)	$\leq 0.3\text{V}$
Shell material	ABS
Shell color	Dark grey
Size(with flexible bracket)	75mm X 27mm X16mm, flexible bracket: 175mm X 60mm X50mm
Weight	200g
Signal line length	1m, 2m, 3m, customized
Protection level	IP54
Working temperature	-40°C to 85°C
Working humidity	5%-85%RHD