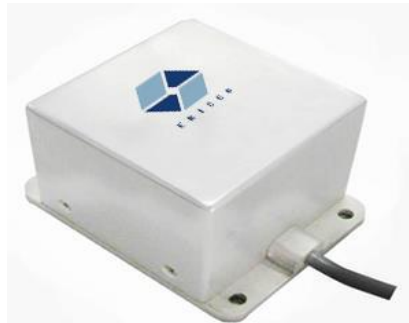


Product presentation

ER-A-11 is an analog balanced servo dipmeter manufactured by five components: non-contact displacement sensor, torque motor, error and amplification circuit, feedback circuit and cantilever mass block. The precision of this series of dipmeter is much better than that of the dipmeter based on the electrolyte principle or the capacitive principle in the performance of non-linearity, repeatability, hysteresis, temperature drift and working temperature, impact resistance and vibration resistance. Internal integration 24 ARM high-end systems, resolution of 0.0001° , the accuracy of 0.0005° , temperature drift: $0.0008^\circ\text{C}/^\circ$, the response frequency of 300 hz (baud rate, 115200), which is an extremely competitive force in the industry product. The features of non-contact mounting make ER-A-11 have excellent system integration. Just fix the sensor on the surface of the object under test with screws, and the attitude Angle of the object can be calculated automatically. Strong ability to resist external electromagnetic interference, strong ability to withstand shock and vibration, in the domestic peer products are absolute competitive advantages, professional application in high-end users of the industrial and military industries.



Main Features

- Dual- axis inclination measurement
- Range $\pm 1^\circ \sim \pm 90^\circ$ for optional
- Response frequency: 300Hz
- DC 9~36V Wide Input Range
- Wide range of temperature $-40^\circ \sim +85^\circ\text{C}$
- Resolution ratio 0.0001°
- IP67 level of protection
- Temperature effect on zero ± 0.0008
- Waterproof air plug
- Size: L110×W65×H32mm
- Output mode RS232、RS485、TTL、PWM for optiona

Product application

- Leveling of engineering vehicles
- Bridge and dam monitoring
- Precision instrument level control
- Medical device Angle control

- Attitude navigation of underground drill
- Railway gauge scale and gauge level
- Directional measurement based on dip Angle
- Slope monitoring of geological equipment
- Measurement of pitch Angle of directional satellite communication antenna

Performance

Parameter	Condition	ER-A-11-05	ER-A-11-10	ER-A-11-15	Unit
Range		±05	±10	±15	°
Measurement axis		X Y	X Y	X Y	
Resolution ratio		0.0001	0.0001	0.0001	°
Absolute precision	@25°C	0.003	0.005	0.006	°
Long term stability		0.002	0.003	0.005	°
Zero point temperature coefficient	-40~85°	±0.0008	±0.0008	±0.0008	°/°C
Spirit acuity temperature The coefficients	-40~85°	≤50	≤50	≤50	ppm/°C
Access to electricity and move time		0.3	0.3	0.3	S
Response time		0.005	0.005	0.005	S
Output rate	5Hz、15Hz、35Hz、50Hz、100Hz、300Hz can set				
Output signal	RS232/RS485/RS422/TTL/CAN				
Electromagnetism capacity	According to EN61000 and GBT17626				

MTBF	≥50000 Hours/time
Insulation resistance	≥100 M
Shock resistance	100g@11ms、Triaxial (half sinusoidal wave)
Anti-Vibration	10grms、10~1000Hz
Waterproofing grade	IP67
Cable	Standard 1 m length, wear-resistant, wide temperature, shielded cable 4*0.4mm ² air connector
Weight	150g(No cable)

Electrical parameters of products

Parameter	Condition	Min	Typical value	Max	Unit
Supply voltage	Standard	9	12、24	36	V
	Customizable		Other voltage		V
Working current	Non-loaded		50		mA
Operating temperature		-40		+85	°C
Storage temperature		-55		+100	°C