

G810: HIGH PRECISION CURRENT OUTPUT ANGLE SENSOR (ABSOLUTE VALUE ENCODER, ANGULAR DISPLACEMENT SENSOR)



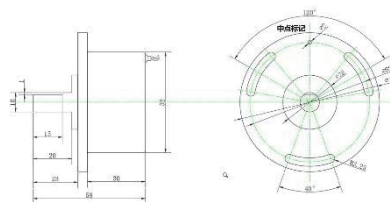
■ PRODUCT DESCRIPTION

G810 series angle sensor embedded microprocessor is combined with a CNC arc-second level calibration device, programmed calibration and conversion, 0.1° high-precision measurement, multiple outputs RS232, TTL, RS485, RS422, CAN, 0-5V, 0.5-4.5V, 0-10V, 4-20mA, 0-20mA optional. The magnetic angle sensor uses MEMS technology to integrate the nanomagnetic focusing thin film material and the differential array magnetic sensitive element to non-contact sense changes in the rotating magnetic field. The system integrates micro-computer, voltage and current transmitters and various protection circuits. Through DSP processing, it performs linearity correction, temperature compensation, standardization of output signals according to the range, digital filtering, zero point setting, and multi-segment different slope settings. programmable intelligent control.

■ PRODUCT MAIN SPECIFICATION

Parameter	Condition	G810-90	G810-180	G810-270	G810-360	unit
Measuring range		0~90	0~180	0~270	0~360	°
Temperature drift	-40~85°	±0.01	±0.01	±0.01	±0.01	°/°C
Resolution		0.01	0.01	0.01	0.01	°
Accuracy	-40~85°C	0.1	0.2	0.3	0.5	°
Long term stability	-40~85°C	0.12	0.21	0.35	0.55	°
Response time	slow/fast	600/200 μs				
Power-on start time		0.2 s				
Output signal	Rload=240Ω	0~20mA, 4~20mA optional				
Noise		5mV				
Midpoint offset	midpoint output (Approach left and right)	4~20mA output 12mA 0~20mA output 10mA				
Average working hours		≥ 55000 hours/time				
Impact resistance		20000g, 0.5ms, 3 _{rd} /axis				
Anti-vibration		10grms、2 ~ 2000Hz				
Operating temperature		-40~85°C				
Waterproof level		IP66 (can be customized IP67)				
Cable		Standard 1.5 meter length, wear-resistant, oil-proof, wide temperature, shielded cable 3 * 0.3 mm ²				
Weight		180g (excluding box)				

■ PRODUCT DIMENSION



■ PRODUCT APPLICATION

- Motor control: servo system, corner position
- Valve: angle actuator
- Ship industry: ship rudder position and hatch door position
- Car safety control: steering wheel
- Coal mining machinery: coal washing machine, mineral concentrator, shield machine
- Textile machinery: tension control, shuttle wire diameter
- Engineering equipment such as cranes, cranes, and excavators
- Robot: attitude control, boom rotation