

C90-A: 65° TILT ANGLE COMPENSATION DIGITA OUTPUT 3D ELETRONIC COMPASS

■ PRODUCT DESCRIPTION

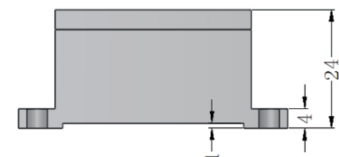
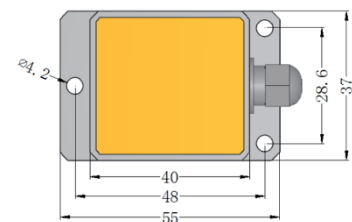


C90-A is a high-precision 3D electronic compass using advanced hard and soft iron calibration algorithms to provide high-precision heading information within a 65° angle range. It has the characteristics of small size and low power consumption, making it more suitable for power volume sensitive measurement systems. This product comes with hard magnetic, soft magnetic, and tilt compensation, and the compass outputs high-precision measurement values after calibration. The three-axis fluxgate integrated with patented technology calculates the heading in real-time through the central processor, and uses a three-axis accelerometer to compensate for the tilt angle, enabling it to provide accurate heading data even in extremely harsh environments.

■ PRODUCT MAIN SPECIFICATION

Parameter	C90-A	
Compass heading parameters	Heading accuracy	0.5° (RMS, pitch<40°) 0.7° (RMS, pitch<55°) 1° (RMS, pitch<65°)
	Resolution	0.01°
	Repeatability	0.1°
	Pitch accuracy	0.1°
Compass inclination parameters	Roll accuracy	0.1° (pitch<65°)
	Inclination angle resolution	0.01°
	Inclination range	±65°
Calibration	Hard iron calibration	Yes
	Soft iron calibration	Yes
	Tilt calibration	Yes
Physical properties	Size	L55*W37*H24 (mm)
	Weight	75g
	RS-232/RS485 interface connector	5-pin aviation connector
Interface features	Startup delay	<50ms
	Maximum sampling rate	50 times/second
	RS-232 communication rate	2400~19200 baud rate
	RS-485 communication	optional
	TTL communication	optional
	Output format	Binary high performance protocol
Power supply	Support voltage	DC+5V
	Current (max)	40mA
	Working mode	35mA
Environment	Storage range	-40°C--+125°C
	Working temperature	-40°C--+85°C
	Vibration resistance	3000g

■ PRODUCT DIMENSION



SIZE: L55*W37*H24MM

■ PRODUCT APPLICATION

- Individual combat equipment
- Petroleum geological logging
- Underwater navigation
- Navigation GPS
- Marine survey
- Ship navigation attitude measurement
- Accurate laser platform equipment
- Unmanned aerial vehicles (UAV)
- Based on inclination monitoring