

## C9000-CV: HIGH PRECISION SIX-AXIS FULL ATTITUDE ELETRONIC COMPASS

### ■ PRODUCT DESCRIPTION

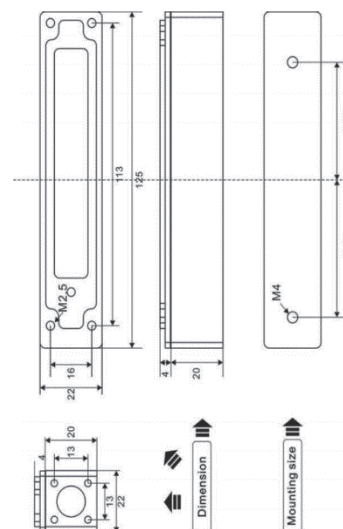


C9000-CV is a high-precision all attitude 3D electronic compass launched by MXMW Hi-Tech Company, integrating digital signal RS232 output and analog 4-20mA, 0-5V output, IP67 waterproof level. It uses advanced hard and soft iron calibration algorithms to provide high-precision heading information within the range of 360° roll and  $\pm 90^\circ$  full tilt angle. C9000-CV has been specially optimized for applications in the petroleum inclinometer field, making it very suitable for inclinometer systems. It can manually or automatically output tilt angle, azimuth angle, and tool surface angle information, and can also output the current magnetic field component size. Users only need to connect C9000-CV to the data transmission circuit to form a high-precision inclinometer.

### ■ PRODUCT MAIN SPECIFICATION

Parameter	C9000-CV	
Compass heading parameters	Heading accuracy	0.3~0.5° (RMS, pitch<85°)
	Resolution	0.1°
	Repeatability	0.05°
Compass inclination parameters	Pitch accuracy	0.1°
	Roll accuracy	0.1° (pitch<65°) 0.2° (pitch<80°) 0.5° (pitch<86°)
	Inclination angle resolution	0.01°
	Inclination range	Pitch $\pm 90^\circ$ ; Roll 360°
Calibration	Hard iron calibration	Yes
	Soft iron calibration	Yes
	Tilt calibration	Yes
Physical properties	Size	L125*W22*H24 (mm)
	Weight	135g
	RS-232/RS485 interface connector	6-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	hexadecimal
	Analog output	4-20mA, 0-20mA, 0-5V, 0-10V (only providing heading angle direction)
Power supply	Support voltage	DC 9~36V
	Current (max)	40mA
	Working mode	30mA
Environment	Storage range	-40°C--+125°C
	Working temperature	-40°C--+85°C
	Vibration resistance	3000g

### ■ PRODUCT DIMENSION



SIZE: L125\*W22\*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