

# Digital Magnetic compass DMC



## DMC002 Series

DMC002 digital compass module is a 3-axis digital compass solution with a unique compensation mode and dedicated algorithms to reduce the effect of hard and soft iron in the DMC reading.

DMC002 model integrates a three axis magnetic sensor that compensates for the tilt angle with a three-axis accelerometer when the heading is solved in real time by the central processor, providing accurate heading data in very harsh environments and having a superior working temperature range from -40/85°C.

### Key features:

- High accuracy 0.5°
- Update rate to 50Hz
- Compact Solution
- Hard and soft-iron compensation
- Magnetic anomaly detection
- Wide working temperature range

### Specifications:

	DMC002
Heading accuracy	0.5° (Pitch<40°) 0.7° (Pitch<60°) 1° (Pitch<80°)
Resolution	0.01°
Repeatability	0.1°
Pitch accuracy	0.1°
Rolling accuracy	0.1° for Pitch < 80°
Dip resolution	0.01°
Tilt range	±80°
Hard magnetic calibration	Yes
Soft magnetic calibration	Yes
Tilt calibration	Yes
Start time	<3Sec.
Frequency response	50Hz.
Anti-vibration performance	2000g.
Shell material	Magnesium alloy anodizing
Communication	RS485/TTL
Power supply	9-35vDC.
Power demand	30mA.
Working temperature	-40/85°C.
Waterproof	IP67
Weight	180gr. only DMC
Size	10x8x6cms.