

GE-100

Heading Sensor Antenna

Specifications

Performance :

Gyro & Magnetic sensor : 3 axis Accelerometer + 3 axis magnetic sensor + 3 axis Gyro-sensor

Antenna : High - reliability ceramic patch

Antenna Lna gain : 25 + / -2dBi, NF : 2.0dB max

Receiver frequency : 1575.42MHz, C/A code

Receiver Architecture : 12-channel all-in-view algorithm tracks & uses up to 12 satellites

Acquisition time :

Cold start < 29 sec. typical

Warm start < 28 sec. typical

Hot start < 1 sec. typical

Position accuracy : 2.5 m

Velocity accuracy : 0.1 m / sec

Output rate GPS : 1 ~10Hz depend on baud rate (4800 ~ 38400)

Heading : 10Hz

Datum : WGS84

Heading update rate : 10 Hz (HDT) heading output port

Communication :

Protocol : NMEA 0183, 38400 baud rate

Signal level : RS232

Cable :

Length : 10 m (standard), 15 m (options)

Description : Multi - color conductors strained in a shielded / weather proof jacket

Power :

Input power : DC 10 - 35 V reverse protect

Voltage regulator : on - board, switching mode type

Consumption : 1.08 Watt typical

EMI filter : rejects power lines interference.

Interface Capability :

Standard output sentences :

GPGSA, GPGSV, GPRMC, VTG, ZDA, HDG & ROT

Custom outputs sentences : PCMN HPR

Physical Construction :

Dimension & Weight : 139x91x66 mm & 565g / 786g with mounting pole

Enclosure : High impact, corrosion-proof ABS

Construction : Hermetically sealed & fully water proof

Mounting : Pole mount to 1"-14 threaded mast

Environmental Conditions :

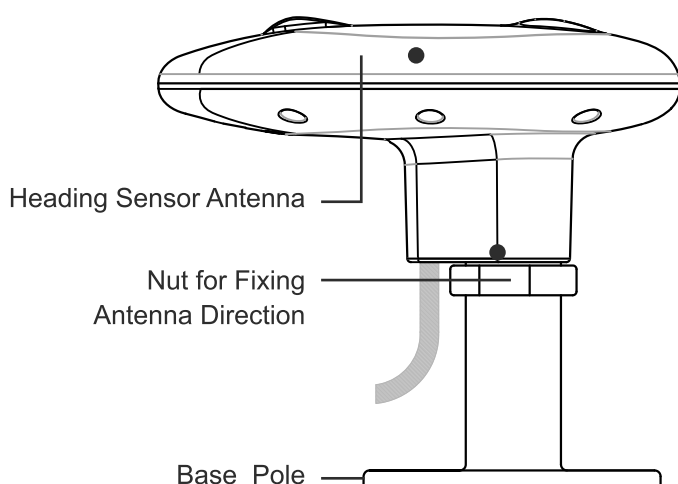
Temperature : Operating : 40 ° C ~ + 85 ° C

Storage : -55 ° C ~ + 100 ° C

Humidity : 5%~95% non-condensing

Water Proof : IPX - 7

Installation :



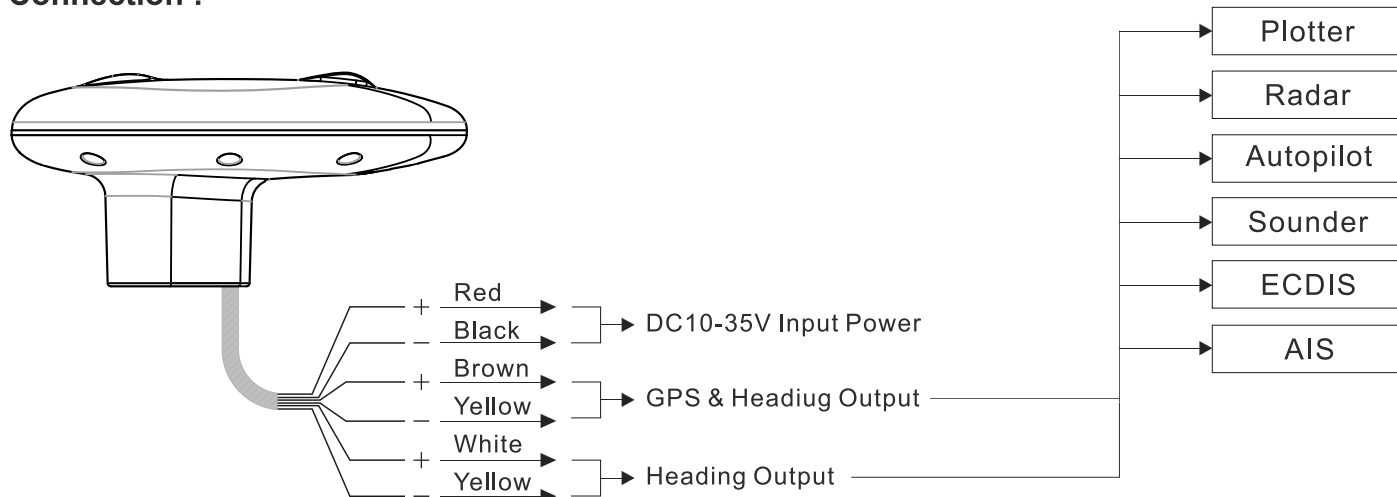
Steps :

1. Before installation please make antenna calibration.
Connect power supplier and keep flat the antenna for 3 seconds for gyro calibration. Then moving the antenna in a figure eight shape for 3 axes for compass calibration. Now calibration is completed and disconnect power.
2. Fix base pole.
3. Rotate the nut to the thread bottom.
4. Rotate antenna and make some space between antenna and nut then make the antenna forward to bow direction of the ship.
5. Rotate the nut anti clockwise to fix antenna.

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Connection :



Pin 1/ Red : Input power +	Pin 5/ White : Heading signal OUT/TX2
Pin 2/ Black : Input power -	Pin 6/ Gray : RS232 signal IN/RX2
Pin 3/ Brown : GPS & Heading signal OUT/TX1	Pin 7/ Yellow : Data Ground
Pin 4/ Green : RS232 signal IN/RX1	

Dimmensions :

Unit : mm

