



Marine GPS Receiver

Model: GR-2000

WI-RD-D-046 V1.0

**Compact & Sensitive Marine GPS Receiver with u-blox
Powerful GPS chipset solution**



© San Jose Technology, Inc. All specifications subject to change without notice.

Overview:

The GR-2000 is the ideal position and heading device. The GR-2000 is built with NMEA 2000 new world standard in marine electronics data protocol. It is brilliant for networking with multiple instruments on boat which is NMEA 2000® certified devices (sensor, sonar, GPS, multi-function gauge, etc.), regardless of brand, will share and/or display user-selectable data with any or all other display instruments installed in a NMEA 2000® network. The GR-2000 offers unique advantages for networking package for multi-station sensing and display of boat systems and engine functions. Those key benefits include simplicity, easy installation, versatility and ease of sensor/display/system expansion, excellent performance and amazing affordability. The advanced precision GPS receiver module applied not only provides extremely accurate and rapid boat position and speed updates, the electronic compass also provides heading for accurate and boat direction at any speed and for radar/chart overlay. The GR-2000 is fully waterproof and can be Pole or surface mounted on any boat.



Features:

- NMEA 2000® position and heading sensor
- 10 Hz updates for accurate location
- Integrated electronic compass provides heading for chart stabilization and radar overlay, plus accurate course over ground even at low speeds
- Supports GPS GNSS including SBAS/QZSS
- Easy installation
- Compact, rugged design for all marine environments and fully waterproof
- Available with Pole or surface mounted on any boat

Applications:

For all GPS applications with networking such as sensor, sonar multi-function gauge, etc.

Specification:

PHYSICAL CONSTRUCTION	
GPS Locator Dimension	80 mm(W) X 71.3 mm(H)
Mounting Base Dimension	110 mm(W) X 70 mm(L) X 75.2 mm(H)
Weight	170 gram(without cable)
Receiving frequency	1575.42MHZ; C/A code
Power/Data Cable	NMEA 2000 thru NMEA 2000 network
Antenna Connector	NMEA 2000 Micro C
ENVIRONMENTAL CONDITIONS	
Temperature	Operating: -20 + 60°C
	Storage: -40 + 85 °C
Construction	fully waterproof IPX7
Humidity	40°C 90%RH Operating
COMMUNICATION	
Interface	NMEA 2000
PERFORMANCE	
Sensitivity	-160dBm (Tracking)
Channels	56 Channels
Start-up time	1 sec. typical (hot start) 3 sec. typical (warm start) 50 sec. typical (cold start)
Position accuracy*	2.5 m ¹ CEP
Horizontal Accuracy	5m
Heading Accuracy	±3°
Rate of Turn	±3°

NMEA 2000 Load Equivalency Number (LEN)	2 (100 mA)	
pitch / roll accuracy	@30 degrees 1 grade error	
Velocity	500 m/s	SBAS: 2.0 m
Altitude	50,000m (Maximum)	
Update Rate	Up to 10Hz	
Power Supply	9 - 18V	
Current Consumption	<90mA @ 12V DC	
NMEA 2000 PNGs		
PNG Number	PNG Title	
126992	System Time	
129025	Position,Rapid Update	
129026	COG & SOG RU	
129029	Position,Data	
129539	GND DOP	
129540	GNS Satellites in View	
127258	Magnetic Variation	
127250	Compass Heading(Vessel Heading)	
127251	Rate of Turn	
127257	Attitude	

* ¹ CEP, 50%, 24 hours static, -130 dBm, > 6 SVs

Mechanical Diagram:

UNIT 單位:mm, TOLERANCE 公差:0.3mm



