



9200G2 DGNSS Receiver

The OmniSTAR 9200G2 is a state-of-the-art GNSS receiver, capable of providing a range of positioning techniques. The device is ideal for system integrators, OEMs, and land based contractors who require real-time positioning. The OmniSTAR 9200G2 receiver can utilize all OmniSTAR DGNSS services, i.e. OmniSTAR VBS for sub-meter level and OmniSTAR HP and XP for decimeter level positioning. The OmniSTAR G2 service (GPS & Glonass) is optional.

The OmniSTAR 9200G2 receiver is low maintenance, cost efficient and incorporates many features for flexible operation. The device can be configured to output positions with an update rate of up to 10 Hz (20 Hz optional), allowing it to be used in a highly dynamic environment. Its rugged, waterproof enclosure protects against rain and dust and keeps the receiver working even in severe conditions. Its integrated display and function keypad that allows for in-the-field monitoring, configuring and measuring. The 9200G2 operates up to 13 hours in tough conditions on a single charge.

The OmniSTAR services

OmniSTAR's DGNSS services provide real-time submeter and decimeter accuracy correction data. These services are either based upon the OmniSTAR reference networks or on Precise Point Positioning technology. Decimetre level accuracy is offered world wide, even in remote areas, such as Kazakhstan, Siberia or the Sahara.

Why choose the 9200G2 receiver?

- Waterproof, shock-resistant and dustproof casing
- User friendly keypad and display for easy configuration and status monitoring
- Suitable for a wide range of applications
- OmniSTAR DGNSS capable
- Can be used with the OmniSTAR IP service
- Integrated battery that also acts as a UPS power supply



Standard Accessories

- Adapter DB26 to DB9, ethernet and power
- Adapter for ethernet and power
- DB9 (female) Y to 0S/7P//M to power jack cable
- Power adapter and cable

Keyboard and display

- VFD display 16 characters by 2 rows
- On/Off key for one button start up
- Escape and Enter key for menu navigation
- 4 arrow keys for option scrolls and data entry



9200G2 Technical specifications

Positioning Accuracy	
VBS service:	30 cm CEP ¹ (50%)
HP/XP service:	10 cm horizontal, 15 cm vertical
Initialisation time:	Static: 10 min. (average)
	Dynamic: 30 min. (average)

¹ Accuracy and reliability may be subject to anomalies such as multipath, obstructions, satellite geometry and atmospheric conditions. Always follow recommended practices.

Code Differential GPS Positioning	
Correction type:	DGPS RTCM v2.x
Correction source:	Satellite, internet

Measurements	
<ul style="list-style-type: none"> • Proven low elevation tracking technology • 72-channel L1 C/A code, L1/L2/L2C Full Cycle Carrier. • Upgradable to GLONASS L1/L2 Full Cycle Carrier. • EVEREST™ multipath signal rejection 	

Antenna Options	
GA510:	L1/L2 GPS, SBAS and OmniSTAR
ANT-GNSS-00:	L1/L2/L5/L2C GPS, GLONASS, SBAS and OmniSTAR

Communications	
Lemo (Serial):	7-pin OS Lemo, Serial 1, 3-wire RS-232 or CAN bus
Modem 1(Serial):	26-pin D-sub, Serial 2, Full 9-wire RS232, using multi-port adaptor
Modem 2(Serial):	26-pin D-sub, Serial 3, 3-wire RS-232, using adaptor cable
1PPS (1 Pulse-per-second):	Available using suitable adaptor cable
Ethernet:	Through a multi-port adaptor
Bluetooth:	Fully-integrated, fully-sealed 2.4 GHz Bluetooth module
External GSM/GPRS/UMTS	Cell phone support for direct-dial and Internet-based correction streams
Correction data input:	OmniSTAR, RTCM 2.x
Data outputs:	NMEA, GSOF, 1PPS

Environmental	
Operating temp:	-40 °C to +65 °C (-40 °F to +149 °F) ²
Storage temp:	-40 °C to +80 °C (-40 °F to +176 °F)
Humidity:	MIL-STD 810F, Method 507.4
Waterproof:	IP67 for submersion to depth of 1 m (3.3 ft), dustproof
Drop:	Designed to survive a 1 m (3.3 ft) pole drop onto a hard surface
Shock:	Non-operating to 75 g, 6 ms
Shock:	Operating to 40 g, 10 ms, sawtooth
Vibration:	Tested to (4.5 g RMS): 10Hz to 300Hz: 0.04 g2/Hz; 300 Hz to 1000 Hz; -6 dB/octave

² Receiver will operate normally to -40 °C. Internal batteries are rated to -20 °C.

Power internal	
<ul style="list-style-type: none"> • Rechargeable 7.4 V, 2.4 Ah Lithium-ion battery in internal battery compartment • Internal battery operates as a an UPS in the event of external power source failure 	

Power external	
<ul style="list-style-type: none"> • Power input on both the Lemo connector and the 26-pin D-sub connector (through adaptor cable) • Power supply (Internal/External1/External2) is hot-swap capable in the event of power supply removal or cut off • 9.5 V DC to 28 V DC external power input with over-voltage protection • Receiver automatically turns on when connected to external power • Power consumption 4.5 W at 18 V in rover mode 	

Operation Time on Internal Battery	
Rover:	13 hours; varies with temperature

Physical Characteristics	
Size (L x W x H):	240 x 120 x 50 mm including connectors
Weight (incl. battery):	1.55 kg

OmniSTAR B.V.

P.O. Box 113 - 2260 AC Leidschendam
 The Netherlands
 Phone : +31 (0) 70 317 0900
 Fax : +31 (0) 70 317 0919
 Email : info@omnistar.nl

