



# Marinestar® 9205 GNSS Receiver



The Marinestar® 9205 GNSS receiver provides users with access to the latest developments in high performance Differential Global Satellite Navigation System (DGNSS) positioning.

## All in View Receiver

The Marinestar® 9205 GNSS receiver is a multi frequency (L1/ L2/L5/E1/E5) receiver that incorporates GPS, GLONASS and Galileo reception capability. In addition it tracks the Fugro L-Band satellite broadcast of DGNSS corrections. As a backup it can receive the DGNSS corrections via Internet.

As well as providing increased accuracy, multi frequency operation means that the Marinestar® 9205 GNSS receiver is well equipped to cope with the effect of the forecast increase in solar activity and interference.

Used in conjunction with the Marinestar® GNSS service, it increases the number of satellites available by accessing the GLONASS satellite constellation (and future Galileo) in addition to the GPS constellation. More satellites means less likelihood of shadowing when operating close to rigs, platforms and other obstructions.

## High Performance Service Compatibility

The Marinestar® 9205 GNSS receiver can be subscribed to the various DGNSS services offered by Fugro such as Marinestar® GPS and the integrated Marinestar GNSS service.

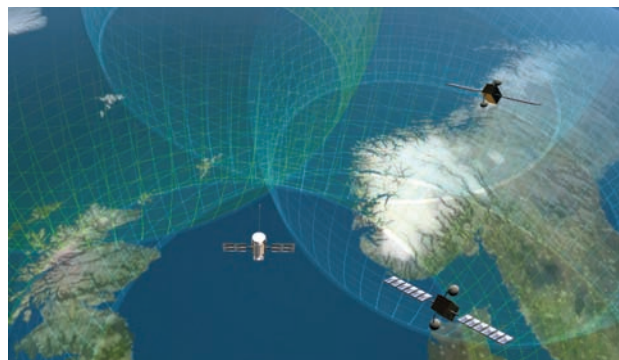
- Marinestar® GPS: GPS orbit and clock solution
- Marinestar® GNSS: Composite GPS/GLONASS orbit and clock solution

The above solutions are dual frequency carrier phase based to achieve decimetre level accuracy.

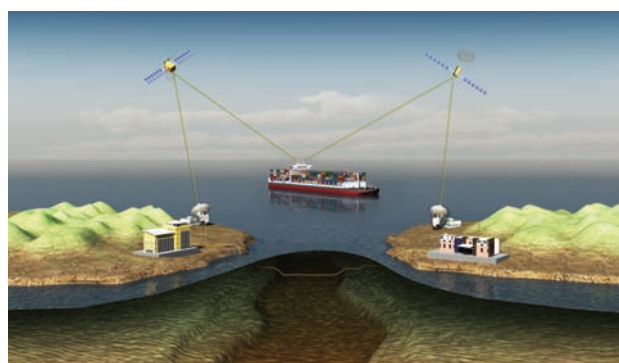
The receiver can be monitored and configured via the front panel display and keypad, or via a web interface.



The Marinestar® GNSS Operations Centre in Oslo



A mix of navigation satellites can be used



Dual satellite broadcast data links in all ocean regions

**MARINESTAR®**

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Marinestar® 9205 GNSS Receiver



Web interface



Marinestar® 9205 GNSS back panel

## MAIN FEATURES

- L1/L2 GPS receiver
- L1/L2 GLONASS receiver
- E1/E5 Galileo receiver
- L-BAND DGNSS receiver
- Corrections via internet
- Display and keypad
- Web interface

## ANTENNA OPTIONS

GA 810 – GNSS antenna  
AD 492 – narrow band filter, interference resistant antenna  
AD 493 – high performance L-band antenna  
Zephyr Model 2 rugged antenna

## TECHNICAL SPECIFICATIONS

### Keypad and Display

Invertible VFD display 16 characters by 2 rows  
Escape and enter key for menu navigation  
4 arrow keys for option scroll and data entry

### Channels

220-channels  
GPS - L1 C/A, L2C code  
GPS - L1/L2/L2C full cycle carrier  
Galileo E1/E5  
GLONASS - L1/L2 full cycle carrier  
SBAS (WAAS/EGNOS/MSAS)  
Fugro L-Band service

### Position Accuracy Marinestar GPS/GNSS

Horizontal: 10 cm (95%)  
Vertical: 15 cm (95%)

### Communications

Lemo (serial): 3 wire RS232  
Modem 1 serial: full 9-wire RS232  
Modem 2 serial: full 3-wire RS232  
1 PPS  
Ethernet multiport adapter

### Data outputs

NMEA messages: GGA; GST, GSA, VTG, ZDA, GNS, GBS, RMC

### Power Requirements

9.5 V DC to 28 V DC, 30W at 24 V DC  
AC input via external AC/DC PSU or Isolating Data and Power Unit (IPDU)

### Temperature

Operating: -40 to +65 °C (-40 to +149 °F)  
Storage: -40 to +80 °C (-40 to +176 °F)

### Dimensions (L x W x D)

24 cm (9.4 in) x 12 cm (4.7 in) x 5 cm (1.9 in)

### Weight

1.55 Kg (3.42 lb)

### Approval

IEC 61108 GNSS performance  
IEC 60945 environmental (IPDU required)  
IEC 61162 interface output

Specifications subject to change without further notice

## Fugro Satellite Positioning AS

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