



FUGRO

SEASTAR® 9410-AUT GNSS RECEIVER

The Seastar® 9410-AUT GNSS receiver provides users with access to the latest developments in High Performance Differential Global Satellite Navigation System (DGNSS) positioning.



ALL IN-SKY RECEIVER

The all new Seastar® multi-constellation, multi frequency GNSS receiver is preloaded with Fugro Seastar® G4. A 10 cm accuracy phase-based service using orbit clock data valid worldwide.

MORE IS SAFER

Use of a wider range of satellites, Seastar® G4 gives more resistance to ionospheric scintillation effects which tend to be localized in a particular parts of the sky. The Seastar® 9410-AUT is 672 channel GPS/ GLONASS/BeiDou /Galileo receiver and comes with multipath signal rejection.

HIGH PERFORMANCE SEASTAR® SERVICE

The Seastar® 9410-AUT GNSS receiver can be subscribed to the various DGNSS services offered by Fugro such as G2, G4, XP2 and XP3.

G4: Composite GPS, GLONASS, BeiDou and Galileo orbit and clock solution
XP3: GPS, GLONASS and Galileo orbit and clock solution from external provider.

MAIN FEATURES

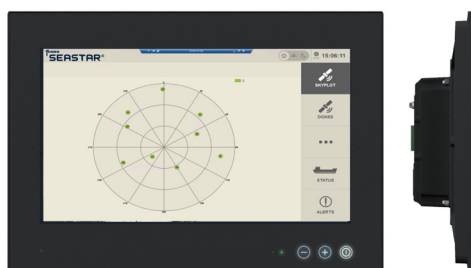
- GPS, GLONASS, Galileo and BeiDou receiver
- Fugro L-BAND DGNSS receiver
- Corrections via internet (Ntrip)
- Prepared for Fugro Satguard®
- Available in an IALA version. All through one antenna.
- Keypad and Web interface
- Advanced dual Maxwell 7 GNSS chipset provide 672 channels for simultaneous satellite tracking and anti-spoofing capabilities
- High-precision multiple correlator for GNSS pseudorange measurements
- Unfiltered, unsmoothed pseudorange measurements data for low noise, low multipath error, low-time domain correlation, and high-dynamic response
- Very low noise carrier phase measurements with <1 mm precision in a 1 Hz bandwidth
- EVEREST™ multipath signal rejection
- Spectrum Analyzer to troubleshoot GNSS jamming

PC BASED QC

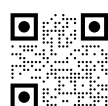
A dedicated PC based QC applications system is also available. Capable of displaying DGNSS Position, Sky Plot, Position Monitoring, Fugro Satguard® as well as system status and alerts.



Seastar® 9410-AUT back panel



Capture of QC display



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Technical Specifications

Keypad and Display

Display 32 characters by 4 rows
On/Off key for one-button startup
Escape and Enter keys for menu navigation
4 arrow keys (up, down, left, right) for option scrolls and data entry

Channels

672 channels	GPS: L1 C/A, L1C, L2C, L5, L2E GLONASS: L1-C/A, L2-C/A, L1P, L2P, L3 Full Cycle Carrier NavIC (IRNSS): L5-C/A Galileo: E1, E5-A, E5-B, E5-AltBOC, E6 BeiDou: B1, B2, B3, B1C, B2A, B2B Fugro L-Band DGNSS Service
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Position Accuracy Seastar

Seastar® G4	Horizontal: <10 cm (95%) Vertical: <15 cm (95%)
Seastar® XP3 (third party)	Horizontal: <10 cm (95%) Vertical: <15 cm (95%)

Communications

Lemo (serial 1): 3 wire RS232
26-pin D-sub (serial 2): 5-wire RS232
26-pin D-sub (serial 3): 3-wire RS232
1PPS (Supported on both Lemo and 26-pin D-sub)
USB v2 (supports USB-PD)
Ethernet multiport adapter: (Network protocols: HTTP, HTTPS, NTP, TCP/IP, UDP, NTRIP (v1 and v2) mDNS/uPnP, DDNS, Email notifications)
Wi-Fi Fully-integrated, fully-sealed 2.4 GHz Wi-Fi module
Simultaneous Access Point (AP) and Client modes.
Bluetooth® wireless technology
Fully-integrated, fully-sealed 2.4 GHz Bluetooth module
Cellular Fully-integrated, fully-sealed LTE compliant module
Bands 1:2:3:4:5:7:8:12:18:19:20:28

Data outputs

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

Power Requirements

24V DC,
Power consumption 6W typical
AC input via separate Power Supply

Temperature

Operating: -40 to +65 °C
Storage: -40 to +80 °C

Dimensions (L x W x D) and weight

27 cm x 14 cm x 7 cm
1.82 Kg

Antenna Options

GA 830 – GNSS antenna
AD 492 – narrow band filter, interference resistant antenna

Approvals

IEC 60945:2002 Section 8, Protected