## SAILOR® 657X DGNSS SYSTEM & BASIC

COBHAM

Network integrated differential satellite navigation

2015 Product Sheet

The most important thing we build is trust

The SAILOR 6570 DGNSS System and SAILOR 6571 DGNSS Basic (Differential Global Navigation Satellite System) set new standards in functionality and flexibility for satellite navigation sensors. Built to the highest quality SAILOR standards, they join the already available SAILOR 639X Navtex and SAILOR 628X AIS as new generation network integrated SAILOR products designed to work in the unique SAILOR 'Multi-Function Universe'.

## **Touch-screen control**

The advanced touch-screen SAILOR 6004 Control Panel forms the heart of the Multi-Function Universe, providing full control for all products connected to it from a single device. Operation of all systems connected to the SAILOR 6004 Control Panel is easy; just select the icon for the product on screen as you would an app on any modern device, to be given full control of all set-up, functions and diagnostics.

## Reliability for critical operations

The SAILOR 6570 DGNSS System and SAILOR 6571 DGNSS Basic collect satellite data from any available navigation satellites including GPS and GLONASS. Using position corrections from reference beacons, position accuracy down to 1 meter is possible for a variety of on board systems such as; ECDIS (Electronic Chart Display System), INS (Integrated Navigation System), GMDSS (Global Maritime Distress & Safety System), SATCOM (Satellite Communication System), MCS (Master Clock Systems) and PABX (Telephone Exchanges).

## The black box brain

The black box SAILOR 6588 DGNSS Receiver is the brain behind the system. The receiver has connections for antenna, power, position and speed log output, LAN connections for SAILOR Control Panel and on board LAN. Together with the SAILOR 6286 Active DGNSS antenna, The SAILOR 6588 DGNSS Receiver acts as the main DGNSS position sensor on board SOLAS vessels.

### **Build your Multi-Function Universe**

The SAILOR 6570 DGNSS System and SAILOR 6571 DGNSS Basic are true SAILOR products. They are 100% designed in-house at Cobham SATCOM, with two versions that provide flexibility for starting or growing your Multi-Function Universe on board. Both versions come with the SAILOR 6588 DGNSS Receiver. The SAILOR 6570 DGNSS System is delivered with the SAILOR 6004 Control Panel and the SAILOR 6286 DGNSS Antenna, while the SAILOR DGNSS 6571 Basic is delivered with the antenna only.





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## Network integrated differential satellite navigation

SAILOR 6588 Receiver



SAILOR 6004 Display

#### SAILOR 6286 Antenna





#### SAILOR 6588 DGNSS RECEIVER

| Receiving Channels              | 30 Channels                                  |
|---------------------------------|--|
| Rx Frequency                    | 1575 MHz (GPS) 1602 MHz (GLONASS)            |
| Position Fixing System          | GPS / GLONASS                                |
| Position Accuracy               | 1 m (DGNSS) - 1.5 m (w/o Differential)       |
| Tracking Velocity               | 0.1 kn                                       |
| Position-Fixing Time Cold start | 45 sec                                       |
| Position Update interval        | 0.5 sec (configurable)                       |
| Beacon Receivers                | 283.5 - 325 kHz MSK three parallel receivers |
| Input Voltage                   | 10.8 to 31.2 VDC                             |
| Power Consumption               | 5W (0.2A @ 24VDC input voltage)              |
| Heat dissipation                | < 10W  |
| Weight                          | 1.3 kg                                       |
| Dimensions (L x W x H)          | 190 mm x 270 mm x 42.5 mm                    |
| Equipment class                 | Protected according to IEC 60945             |
| Temperature range (operation)   | -15°C to 55°C                                |
| Temperature range (storage)     | -30°C to 80°C                                |
| Compass Safe Distance           | 300 mm (standard magnetic compass)           |
|                                 | 200 mm (Emergency magnetic compass)          |
| Antenna connector               | TNC female                                   |
| Control Panel Connection        | LAN  |
| Mounting                        | Bulk head or table mount                     |
|                                 |  |

#### INTERFACES

| LAN Interface w/ QoS Management | 2 ports, RJ45, RSTP switch               |
|---------------------------------|--|
| 2 serial inputs                 | NMEA0183                                 |
| 2 serial outputs                | NMEA0183                                 |
| 1 serial input / output         | NMEA0183                                 |
| Speed Log Output                | 100/200/300/400 pulses per nautical mile |
| Alarm Relay                     | NO/COM/NC                                |
| Pulse per Second                | PPS output                               |
| Antenna                         | GNSS / DGNSS Antenna                     |

#### SAILOR 6004 CONTROL PANEL

| Mounting method   | Flush mount, table mount or bulk head mount. |
|-------------------|--|
| Power Supply      | 10.8 to 31.2VDC                              |
| Power Consumption | Typical: 18 W active                         |
|                   | Peak: 42 W                                   |
|                   | 3.15 A internal fuse (non-serviceable)       |

| Audio input            | Up to 6 W in 8 Ohm                                 |
|------------------------|--|
| Interfaces             | 2 x Ethernet (10/100Mbit/s)                        |
|                        | Accessories connector                              |
|                        | Auxiliary Connector                                |
| Compliance             | - IEC 60945  |
|                        | - IEC 60950-1                                      |
| IP rating              | IP54   |
| Ambient temperature    | -15°C to +55°C                                     |
| Storage temperature    | -30°C to +80°C                                     |
| Compass safe distance  | 0.6 m  |
| Dimensions (W x H x D) | 191 mm x 141 mm x 61 mm (without mounting bracket) |
| Weight                 | 1.1 kg (1.25 kg. with mounting bracket)            |

#### SAILOR 6286 DGNSS ACTIVE ANTENNA

| Dimensions            | Ø: 142 mm, H: 53 mm                                 |
|-----------------------|---|
| Weight                | 0.57 kg   |
| Mounting              | Bracket mount on pipe, thread 1 1/4" x 11 TPI       |
| Equipment class       | Exposed, according to IEC 60945                     |
| Antenna type          | Active patch antenna for GNSS combined with H-field |
|                       | antenna for beacons                                 |
| Frequency             | 1560 to 1608 MHz                                    |
|                       | 283.5 to 325 kHz                                    |
| Impedance             | Nominal 50 Ohm                                      |
| Polarization          | Circular right-hand for GNSS                        |
| Coverage              | Hemispherical                                       |
| Selectivity           | 30 dB down at center ±42 MHz for GNSS               |
| Gain                  | 25 dB   |
| Supply voltage        | 5 ±1 VDC  |
| Current consumption   | Approx 50 mA  |
| Connector             | TNC female  |
| Cable                 | Coax cable recommended (max 10 dB signal loss)      |
| Operating temperature | -40°C to +55°C                                      |
| Storage temperature   | -40°C to +80°C                                      |
|                       |   |

For further information please contact:

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