

# GNSS

490003-P

## Heavy duty GNSS antenna: 5 Satellite Systems in one antenna A) GPS, B) Galileo, C) Glonass, D) BeiDou & E) Egnos

GNSS is a Global Navigation Satellite System for both marine and landbased solutions. GNSS covers five satellite systems in one antenna: GPS, Galileo, Glonass, BeiDou, and Egnos, all with outstanding RF specifications:

- A) GPS (L1): Fc 1575.42 (+/-15: 1560-1590), VSWR:<2.0:1, 26dBd.
- B) Galileo (E1): Fc 1575.42 (+/-12.276: 1563.144-1587.696), VSWR:<2.0:1, 26dBd.
- C) Glonass (G1): Fc N/A (1598.0625-1605.37), VSWR:<2.0:1, 26dBd.
- D) BeiDou (B1): Fc 1575.42 (+/-16.368: 1559.052-1591.788), VSWR:<2.5:1, 25dBd.
- E) Egnos (L1): Fc 1575.42 (+/-1.023: 1574.397-1576.443), VSWR:<2.0:1, 26dBd.

The GNSS antenna can be installed directly on the deck, it withstands walking pressure, or can be mounted on a rail mount. The antenna withstands harsh environmental conditions, both on sea and land.

### Short description

|               |                                      |
|---------------|--------------------------------------|
| Product group | GPS                                  |
| Design        | Active positioning receiving antenna |
| Pattern       | Omnidirectional                      |

### Electrical specifications

|                              |   |
|------------------------------|---|
| Frequency range [MHz]        | A) GPS(L1), B) Galileo(E1), C) Glonass(G1), D) BeiDou(B1), E) Egnos(L1) |
| Bandwidth [MHz]              | 46.318  |
| Nominal Impedance [Ohm]      | 50  |
| Supply Voltage [VDC]         | 2.5 - 24.0  |
| Max. Input Power [Watt]      | Receive only  |
| Electrical/Noise Figure [dB] | 0.9   |
| Gain with Amplifier [dB]     | A+B+C+E: 26 D: 25   |
| VSWR                         | A+B+C+E: <2.0:1 D: <2.5:1   |
| Polarisation                 | RHCP  |
| DC Shorted                   | No  |
| DC Grounded                  | Yes   |
| Connector                    | SMA-Female  |

### Mechanical specifications

|  |                                |
|--|--------------------------------|
| Length [m/ft]                          | 0.06 / 3.00                    |
| Weight [kg/lbs]                        | 0.07 / 0.16                    |
| Survival Wind Speed [km/h / m/s / mph] | 200 / 55 / 124                 |
| Material                               | POM, brass and stainless steel |
| Colour                                 | White                          |
| Operating Temperature Range [°C/°F]    | -40 to +70 / -40 to +158       |
| Ingress Protection                     | IP68                           |
| Thread                                 | M12x1.25 thread / -            |
| Mounting                               | Through hole                   |



