

# Universal EGNOS/WAAS GPS Antenna

This SMART DGPS RECEIVER is based on an ultimate 16 channels GPS engine that delivers accuracy better than three meters by decoding the GPS correction signals from the satellite-based WAAS (*Wide Area Augmentation System*). The GPS engine, interface electronics and the passive antenna are enclosed inside the water-proof plastic housing. This provides advanced state of the art GPS performance in an easy to use package.



## TECHNICAL SPECIFICATIONS

### Physical Characteristics

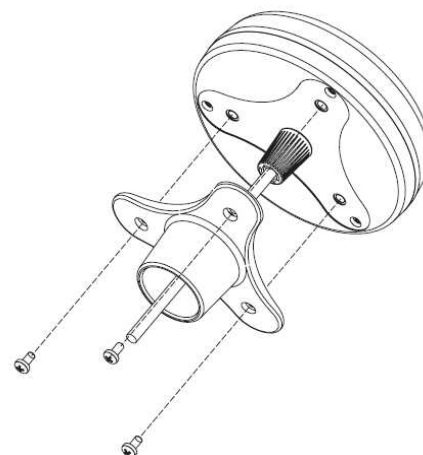
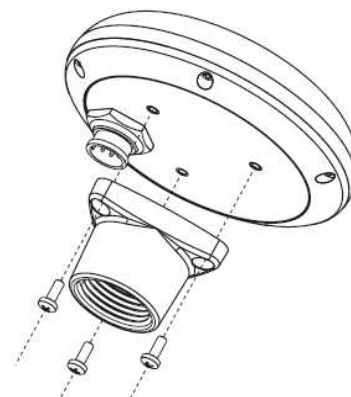
- ◊ Color : Ivory white
- ◊ Dimensions : 97mm in diameter x 32mm in height (flush mounted) or 61.5mm on flag-pole mount
- ◊ Weight : 160 grams (without cable)
- ◊ Cable GSU : white 15 meter 8x28AWG cable with 6 pins female connector
- ◊ Cable GSU with connector : white 15 meter 8x28AWG cable with 6 pins female and 8 pins female connectors

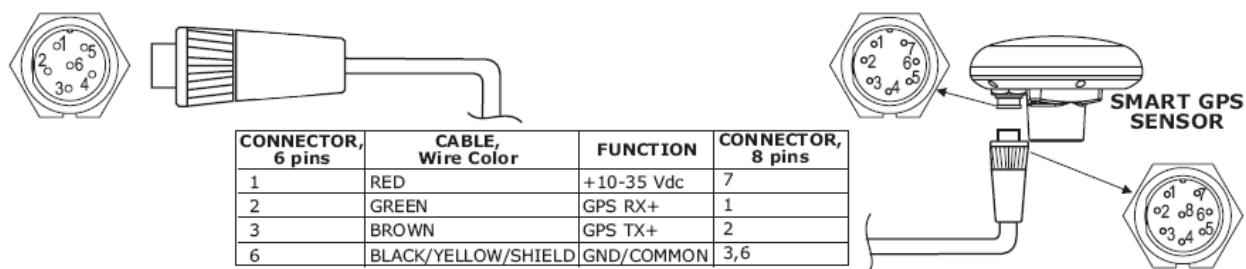
### Electrical Characteristics

- ◊ Input Voltage : 10 Vdc to 35 Vdc unregulated
- ◊ Power Consumption : 0.8 W max
- ◊ Electrical Interface : TTL voltage levels, RS-232 polarity

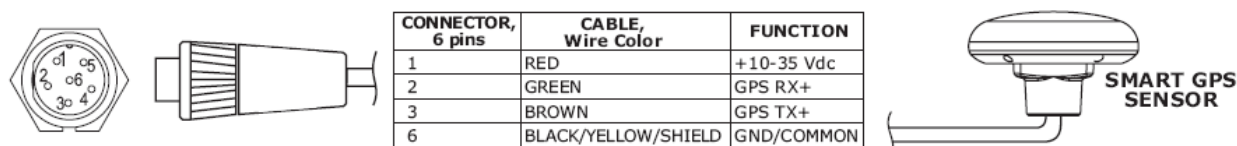
### Performance

- ◊ Receiving Method : 16 channels parallel (up to 3 for WAAS Satellites)
- ◊ Receiving Frequency : 1575.42MHz (L1, C/A code)
- ◊ Receiving Sensitivity : Less than -134 dBm
- ◊ Time to First Fix (TTFF)
- Warm Start : 33 seconds (typical)
- Cold Start : 40 seconds (typical)
- ◊ Accuracy
- Position : Less than 2.5mCEP<sub>1</sub> 5.0mSEP<sub>2</sub>: GPS:(SA=OFF; HDOP<4)
- Less than 2.0mCEP<sub>1</sub> 3.0mSEP<sub>2</sub>: DGPS:(SA=OFF; HDOP<4)
- ◊ Dynamics
- Acceleration : Strong Signals <= 4g
- Weak Signals typical 1g
- Altitude<sub>3</sub> : 18000m
- Velocity<sub>3</sub> : 1850Km/h (515 m/sec)
- ◊ DGPS format : WAAS; EGNOS; MSAS
- ◊ Output format : NMEA-0183 Baud rate 4800 N81
- ◊ NMEA Output messages : GGA, RMC, GSA, GSV, TXT
- ◊ Geodetic Datum : WGS84





Connections for GPS with APC (Antenna Plug Connector)



Connections for GPS with fixed wire connection

### Part Numbers & Equivalents:

935-940C (APC Version) & 935-942C (Fixed Wire Version)

As supplied units are plug compatible with:

Cetrek plotters and autopilots, Siewa plotters and most Standard Horizon

The APC Version is cable compatible with:

Cetrek 940, 941, Siewa GPS Modules and Standard Horizon GPS Modules

Alternative Connections (Remove 6 pin cable plug & connect as per table above):

Raymarine (with NMEA input), Simrad/Navico, Navman, Standard Horizon, Furuno,

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Maritime House, Sandford Lane  
Wareham. Dorset  
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