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# Invicta 210

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The Invicta 210 is the latest design of differential GPS receivers providing realtime sub-1.0 meter (rms) position solutions. The Invicta operates off the USCG network of radiobeacons providing FREE DGPS service. Plus it is compatible with the Wide Area Augmentation System (WAAS). A front panel display provides the user easy access to menu screens for configuring the receiver and displaying vital satellite and system performance information. Software is not required to set up the Invicta 210 receiver. Just plug it in and you're ready to go.



# Invicta 210

## Standard Features

- Front panel display and control
- Dual serial RS232 ports up to 38.4 K
- Supports almost all NMEA format messages
- Position solutions at up to 10 per second with 10Hz option
- Interfaces to marine gyro compass using a Raven GIB-1S.
- 1 year 48-hour repair or replace warranty included
- Versatile message handling capabilities
- Best tech support in the industry
- Utility features including built-in acreage calculation
- Simulated Doppler radar output
- RADAR (ARPA) speed log output
- Regulated power output for special applications
- Easy interfacing to Raven lightbar guidance systems

## Environment

- Operating Temperature: 40o to +70o
- Relative Humidity: 95% non-condensing
- Altitude: 60,000 Feet
- Maximum Velocity: 1,000 Knots
- Acceleration: 2G

## Physical Characteristics

### Invicta 210 Receiver

- Front panel LCD display and control panel
- Size: 2.1"H X 5.7"W X 210mmD  
(53mmH X 144mmW X 210mmD)
- Weight: <3 lbs.

## GPS Antenna

- Size: 3.5"H X 4.5"D
- Weight: <1.3 lbs

## GPS Receiver Performance

- Channels:
- Position Update Rate: Up to 10Hz
- Accuracy: Differential accuracy better than 1 meter horizontal RMS
- Acquisition Time
  - Warm Start: 40 Seconds
  - Re-Acquisition: 1 Second
  - Cold Start: 6 minutes (typical)
- NMEA: ??

## Beacon Receiver Performance

Channels:	2 independent channels, 1 blanking channel
Frequency Range:	283.5-325.0 kHz
Frequency Selection:	Automatic/Manual
Channel Spacing:	500 Hz
MSK bit rate:	50, 100, 200 bps
Demodulation:	Minimum Shift Keying (MSK)
Sensitivity:	2.5 $\mu$ V/m for 10 dB SNR
Adjacent Channel Rejection:	>36dB @ 1Khz >28 dB @ 500 Hz

## Power

- Requirements: 11-32 VDC
- Consumption: 5 watts @ 12VDC
- Connectors: 2 RS-232 I/O

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**1-800-243-5635**

