

GPS Data Acquisition VBOX II Lite



Overview

The VBOX Lite is a powerful instrument used for measuring the speed and position of a moving vehicle. It is based on a new generation of high performance satellite receivers, and provides accurate measurement of acceleration figures, lap times, cornering forces and much more. Due to the small size and simple installation procedure, the VBOX is ideally suited for use in cars, bikes, off road vehicles and boats. The VBOX Lite is supplied with powerful analysis software which can be used to graph VBOX data against distance or time and also plot vehicle path on a track overlay.



Features

- Non-contact speed and distance measurement using GPS
- Compact Flash support
- 1Mbyte Internal memory
- RS-232 serial interface
- Can be used with Racelogic Multi Function Display

Specification

Velocity

Accuracy	0.2 Km/h
Units	Km/h or Mph
Maximum velocity	1000 Mph
Minimum velocity	0.1 Km/h
Resolution	0.01 Km/h

Distance

Accuracy	0.05% (<50cm per Km)
Units	Metres / Feet
Resolution	1cm
Height accuracy	10 Metres 95% CEP**

Absolute Positioning

Accuracy	5m 95% CEP**
Resolution	1 cm

Heading

Resolution	0.01°
Accuracy	0.2°

Time

Resolution	0.01 s
Accuracy	0.05 s

Acceleration

Accuracy	1%
Maximum	20 G
Resolution	0.01 G

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Memory

Internal memory	1 Mbyte battery backed SRAM
Recording time	Approx 55 minutes logging all GPS channels

External memory support

Recording time	Compact Flash type 1 Dependant on CF capacity. Approx 4.3 megabytes per hour used while logging all GPS channels.
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Power

Input Voltage range	6-18v DC
Current	Typically 560mA

Environmental and physical

Weight	Approx 500 grammes
Size	119mm x 128mm x 30mm
Operating temperature	-30°C to +60°C
Storage temperature	-40°C to +85°C

Definitions

** CEP = Circle of Error Probable	95% CEP (Circle Error Probable) means 95% of the time the position readings will fall within a circle of the stated diameter
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External dimensions

