



Introduction

VB3i is an updated version of the successful VBOX III. It retains all functionality of the VBOX III but adds features such as improved latency, the ability to integrate IMU data, improved brake stop accuracy, USB interface, integral Bluetooth interface and audio interface for voice tagging.

The core of the VBOX 3i has been updated from a 166MHz processor to a 400MHz device with a floating-point maths co-processor capable of over 760 million instructions per second. This allows the option of real-time inertial integration when combined with the Racelogic IMU.

As with VBOX III, the logged data is stored directly onto a compact flash card for easy transfer to a PC. When used with a DGPS BaseStation, VBOX 3i is capable of achieving 40cm positional accuracy. 2cm CEP positional accuracy is also possible using the VB3i RTK version. In addition this will require the RTK version of the BaseStation.

VBOX 3i is compatible with all of the existing peripherals including the Multifunction display, ADC03, TC8, FIM02 and Yaw rate sensor.

The table below details the key differences between VBOX III and VBOX 3i

VBOX III



VBOX 3i



VBOX III	VBOX 3i
Latency	
12.5ms	5.5ms
Positional Accuracy Resolution	
1cm	0.1mm
Brake Stop Accuracy	
+/-5cm	+/-1.5cm
Interfaces	
2 x CAN	2 x CAN
1 x RS232	1 x RS232
	1 x USB
	1 x Bluetooth
	Audio Voice Tagging
IMU Data Integration	
No	Yes – data from an external IMU can be used to provide corrections to noisy GPS data.
Power	
6-30VDC, 10.6W max	6-30VDC, 6W max
Physical	
170mm x 121mm x 41mm	170mm x 121mm x 41mm
Approx 900 grammes	Approx 800 grammes