

VBOX HD (RLVD10H1N)

VBOX HD takes video data logging to a new level.

VBOX HD is designed to give you crisp, high definition video supported by quality GPS data captured at 10 times per second.

The superfast 720p global shutter CMOS sensor totally eliminates distortion caused by vibration or high dynamics, whilst the tiny camera makes it extremely versatile and discrete.



Video and test data are recorded onto a removable SD card and can be easily analysed with our powerful Circuit Tools analysis software. Graphics can be overlaid onto the video in post processing.

Using the VBOX File Processor software, video recorded by the VBOX HD can be synchronised with 20Hz or 100Hz data logged by other VBOX models. CAN logging capability will be available via a firmware upgrade.

Unlike our Video VBOX range the VBOX HD does not support multiple cameras. If this feature is important to you then please take a look at [Video VBOX Lite](#), [Video VBOX Pro](#) or [Video VBOX Waterproof](#).

Features

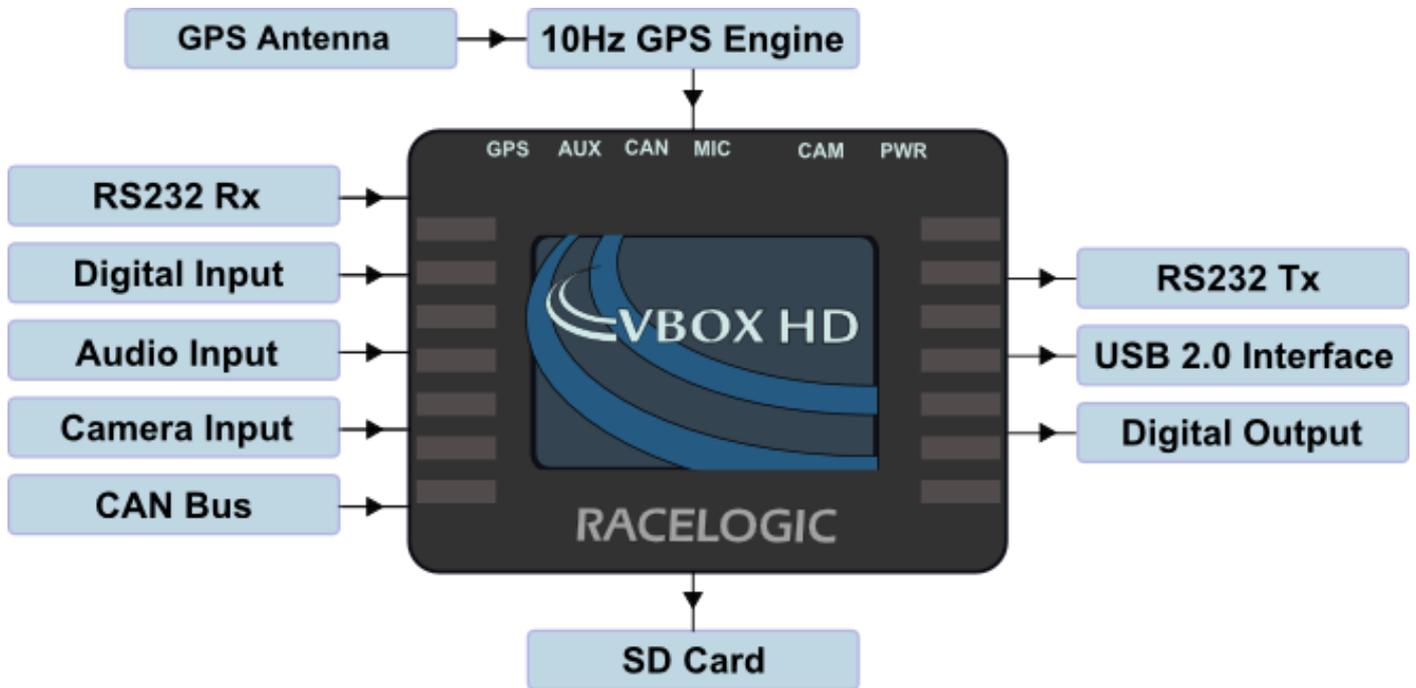
- Built in 10Hz GPS data logger
- 720p30 HD camera
- SD card logging
- USB 2.0 interface
- Post process graphic overlay
- MP4 video & audio recording
- Internal tank circuit: Keeps logging even when power lost for up to 30 seconds
- Powerful analysis software
- 32 CAN channel inputs



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Inputs and Outputs



Inputs	Outputs
RS232 Rx Connects to OLED Display	RS232 Tx Connects to OLED Display
Digital Remote Logging Switch	Digital Output To drive indicator LED on Remote Logging Switch/ For camera alignment with the Preview Monitor
Audio 1x Automatic level control; supports condenser microphone	Audio 48kHz mono
Camera 1x camera powered from recorder unit	Video HD or analogue composite
CAN Bus Allows user to log vehicle CAN data from up to 32 CAN channels	SD Card 8GB card supplied with device
	USB For logging only

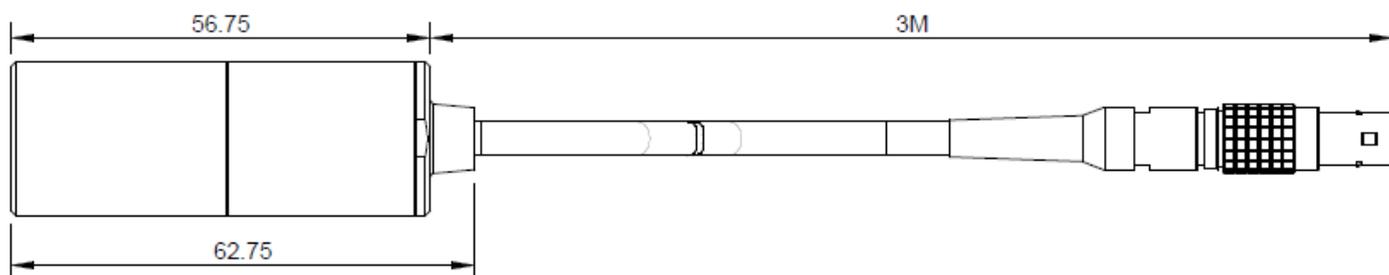
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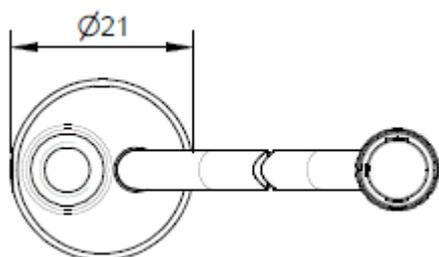
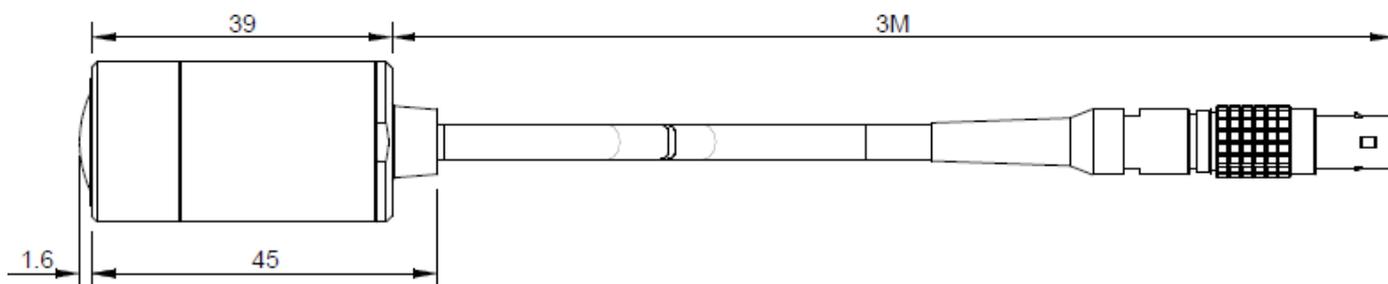
Cameras Specifications

Sensor	CMOS global shutter progressive
Sensor size	1/3"
Sensor resolution	1.3 Mega Pixels
Camera mounting	Standard 1/4" UNC mounting thread
Lens options	60° and 133° (see below)
Resolution	1280 x 720
Frame rate	30 frames per second
Dynamic range	61.3 dB
Operating temperature	-30°C to +70°C

60° Bullet Camera (ACS190M)



133° Bullet Camera (ACS191M)

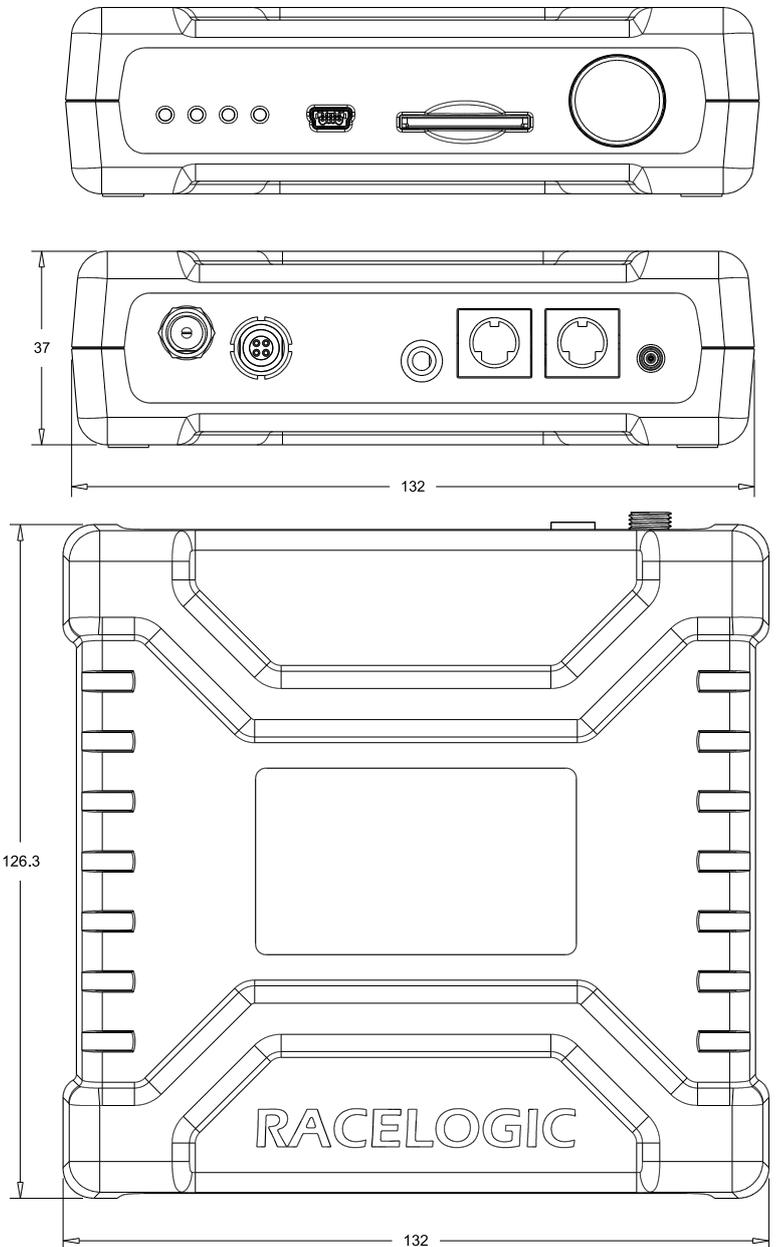


Both camera options

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Recorder Specifications

VBOX HD (RLVD10H1N)	
Logging rate	10 updates per second
Media type	SDHC card or SDXC card (Max. 128Gb/ Fat32)
Video codec	h.264
Video output	HD / Analogue composite
Audio codec	AAC
Audio sampling frequency	48kHz Mono
Recording options	Record only when moving (default); Continuous record; Record start/stop button
Bit rate	3-15 Mbps
Memory usage	Dependent on bit rate. At high quality settings approx. 4GB/hr
Operating temperature	-10°C to +55°C
External power	6-30v, approx 7 Watts
External audio	3.5mm jack input
Size	132mm x 126.3mm x 37mm
Weight	266g
Storage temperature	-20°C to +60°C



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GPS Specifications

Velocity		Distance	
Accuracy	0.2 Km/h (average over 4 samples)	Accuracy	0.05 % (<50cm per Km)
Units	Km/h or Mph	Units	Metres / Feet
Update rate	10 Hz	Resolution	1 cm
Maximum velocity	1600 km/h		
Minimum velocity	0.1 Km/h		
Resolution	0.01 Km/h		
Latency	<160ms		

Position		Acceleration	
2D Position	±5m 95% CEP *	Accuracy	1 %
Height	10 Metres 95% CEP *	Maximum	4 g
		Resolution	0.01 g

Heading		Lap Timing (OLED/ Circuit Tools)	
Resolution	0.01° (average over 4 samples)	Accuracy	0.01 s **
Accuracy	0.5°		

Definitions

* CEP = Circle of Error Probable. 95% CEP means 95% of the time the position readings will fall within a circle of the stated radius.

** Not using DGPS and crossing the start/finish line at 100km/h

Software

Windows software	
VBOX Tools available after product registration Circuit Tools data analysis software VBOX HD Setup Software (incl. post process graphic overlay)	

Support	
Hardware	One Year Support Contract
Software	Lifetime Support Contract: Valid for a minimum of 5 years from the date of purchase and limited to the original purchaser. Contract includes: telephone/ email technical support provided by local VBOX Distributor and firmware/ software upgrades (where applicable).

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Package Contents

VBOX HD with 60° Camera (RLVD10H1N)	Product Code
1 x VBOX HD Recorder Unit	VB10H-V2
1 x 60° HD Bullet Camera	ACS190M
1 x VBOX Lightweight Windscreen Suction Mount	RLACS125
1 x Forward Facing Camera Mount	RLACS116
1 x External GPS Antenna	RLACS070
1 x Mono Microphone	RLACS133
1 x 8 GB HC SD Card inc. Circuit Tools and HD Setup Software	RLACS138
1 x Cigar Plug Power Cable (2m)	RLCAB010M
1 x Video VBOX 3.5" Preview Monitor	RLACS121-M

Optional Accessories	Product Code
Roll Cage forward facing 2 part camera mount	RLACS149
VBOX HD Carry Case	RLACS195
VBOX HD Mains Adapter	RLACS209
Remote start/stop logging switch	RLACS164-M
Remote start/stop and USB logging switch	RLACS164-MU
Remote start/stop and USB logging switch with Mini DIN Socket for preview monitor	RLACS164-MUP
Locking 2.1mm Plug - Unterminated - 2m (Unterminated PWR)	RLCAB014M
6W Mini DIN Plug - 6W Unterminated - 2m (Unterminated PWR/DATA)	RLCAB015M
USB Mini B Plug - USB A SKT - 2m (USB DATA LOGGING)	RLCAB073M