

IMU Roof Mount (RLACS216)



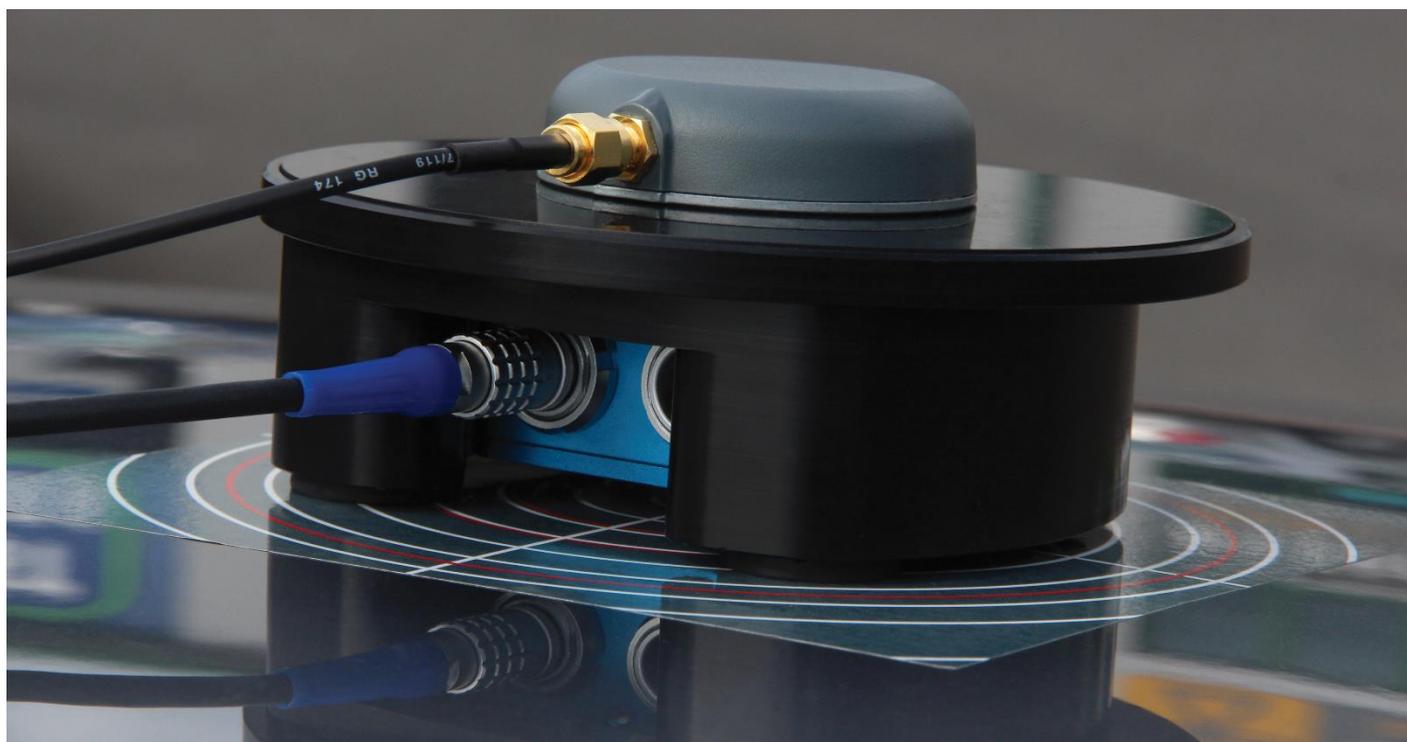
The IMU Roof Mount allows for an IMU04 to be placed directly on the vehicle roof, co-located with the GPS antenna. It is the easiest and most accurate method of mounting the unit.

The machined enclosure fastens securely around an IMU04; a magnetic base ensures that the IMU04 stays safely in place. The antenna is placed directly above the IMU, ensuring that the data sources are being measured at the same point.

Co-locating the GPS antenna and the IMU greatly improves the performance of the Kalman Filter within the VBOX 3i. By putting the two together and mounting them on the vehicle's roof, there is no requirement to measure the distance from the antenna mount to the IMU location for lever-arm correction.

With the GPS and inertial data sources coming from the same point, this critical measurement is no longer needed, leaving only the required translation to – typically – the vehicle's centre of gravity (CoG).

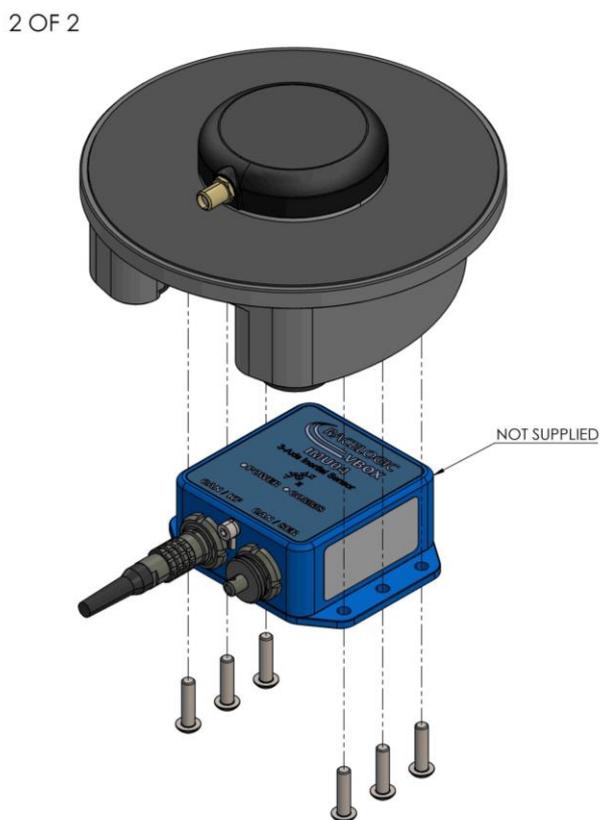
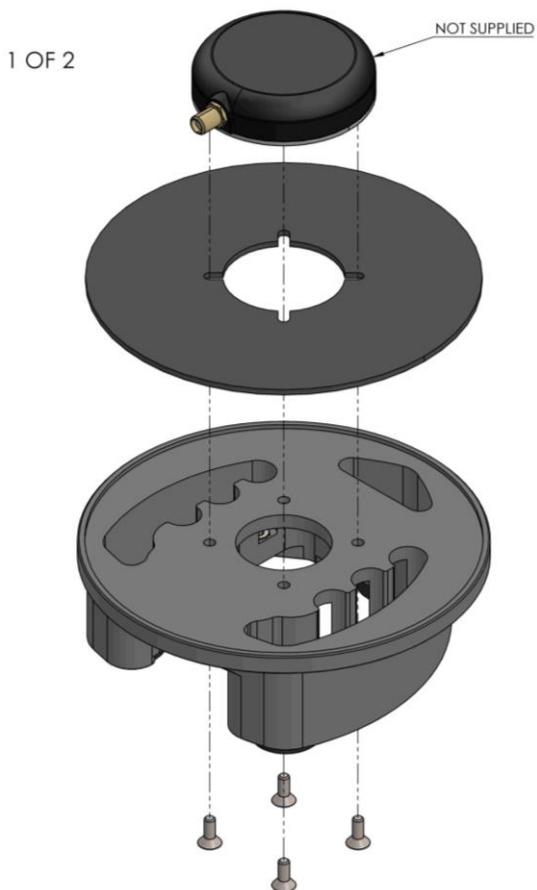
The CoG position that can be entered into the box and errors that can occur when manually measuring the IMU to antenna offsets are avoided. This method is easier and isn't prone to human measurement error.



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IMU Roof Mount Assembly



Package Contents

Description	Product Code
VBOX IMU04 Roof Mount Adaptor	MECH0218
Magnet System 22mm (3x)	MS-22-B
VBOX 3i Roof Mount Ground Plane	MECH0084
M4 Nylock Nuts (3x)	142-0441
M4 Stainless Nuts, hex (6x)	M4FULLNUTS/S
6-32 UNC x 3/8" Countersunk Hex Socket Screws (4x)	6X3/8CSKHEX
M4X16 SKT Screw Buttons (9x)	142-0723
Hex Key 2.5mm	HEX KEY 2.5
Hex Key 2mm	HEX KEY 2.0