

Document Number		RG_SPEC-0097	
Title		Driver ID Module	
Revision	Date	Prepared By	Change History
1.0	10/28/2019	HW	Initial Release
1.1	1/12/2021	HW	Update Dimensions for new Enclosure
1.2	4/19/23	KM	Updated LED Output for Firmware 1.27

Part # RG.DV.PV0176.02 - IMSA DRIVER ID BOX 2021

Description:

This Driver ID module is required for the IMSA Michelin Pilot Challenge and Prototype Challenge Series. The module reads the driver helmet resistor value using a voltage divider circuit. The voltage value is then correlated to a Driver ID number. It then transmits this value via CAN to the X2 transponder for the IMSA timing and scoring system. Basic CAN diagnostics allow the module to report if there is no CAN bus traffic detected for proper operation.

Technical Specifications

Supply Voltage: 9.0v – 18.0v

Current: 100 mA max draw

LED output:

- Blue Flash on Power-Up (For Firmware 1.27 or newer)
- Red solid light if CAN Bus is not Active (For Firmware 1.27 or newer)
- Green Flash of the Driver ID Number (1-5) after power-cycle five times in a row
- Green Flash of the updated Driver ID Number (1-5) on a driver change

CAN communications: Driver ID information sent to X2 transponder
Diagnostics sent for internal use

Operating temp: -40°C to 85° C

Size: 1.94in X 1.45 in X 0.64 in
49.25 mm x 36.8 mm x 16.3 mm

Weight: 90 grams

Mounting: Double sided Velcro or similar

Harness: 150 mm wire lead

Helmet Plug Resistance (ohm)	Driver ID sent on CAN
0	1
820	2
2200	3
4700	4
12000	5
N/C (No Driver ID)	0

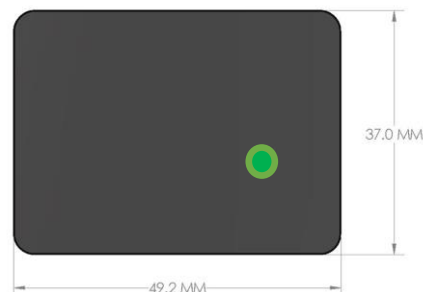


Figure 2: Dimensions of Driver ID Module