



Scrutineering

Product information:

Scrutineering Data Logger – 24h series powered by Hankook

24H SERIES
POWERED BY  **HANKOOK**

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Components



Naturally aspirated engine

- | | |
|---------------------------|--------------------------------------|
| 1.- Holder kit SDL Logger | 5.- Extension for pressure sensor |
| 2.- AIM EV05 | 6.- Pressure sensor 0-5 Bar absolute |
| 3.- Mini USB Adapter | 7.- 4x Fixation (silent blocks) |
| 4.- AIM GPS Module | 8.- Harness 37 Pin, SDL |

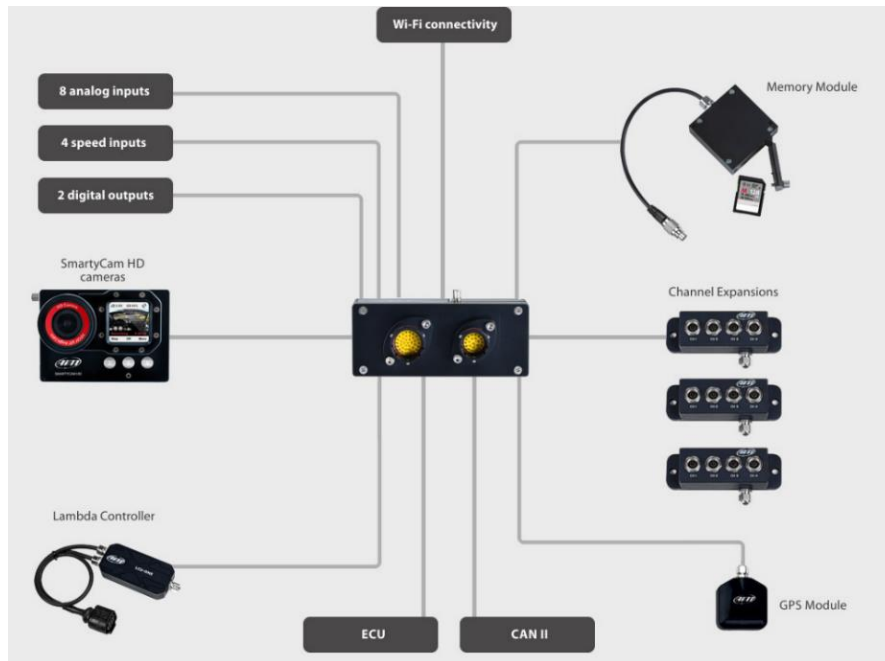
Turbo engine

- | | |
|---------------------------|---|
| 1.- Holder kit SDL Logger | 5.- 2x Extension for pressure sensor |
| 2.- AIM EV05 | 6.- 2x Pressure sensor 0-5 Bar absolute |
| 3.- Mini USB Adapter | 7.- 4x Fixation (silent blocks) |
| 4.- AIM GPS Module | 8.- Harness SDL EV05 |

Product information

EV05

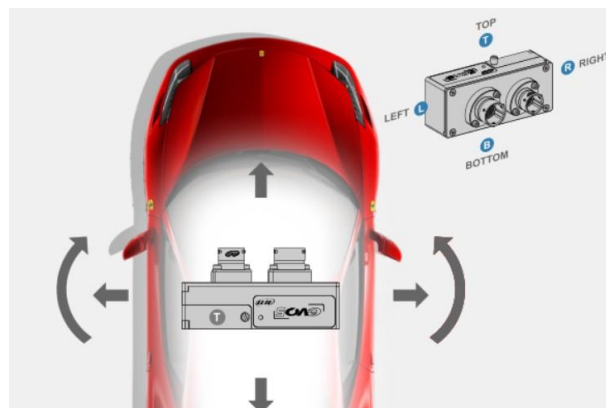
Connection example



Placing the data logger inside the car

You must set the data logger AIM EV05 at front right side of the car (passenger side). The EV05 must be placed like in the photo below, the connectors must look to the front. We provide the EV05 holder and this must be fixed in the area previously mentioned by bolts or Velcro (fix in the best possible way to avoid vibrations and then be able to obtain a good data reading).

It is important that the USB connection is accessible to facilitate the work of the Screening.



Product information

Here is one image as an example of a correct placement:



Check the system works

The teams are the last responsible to ensure the system works. The led situated on the top of EV05 next to SD slot, indicates information about the system:



Logger status	Led colour	Blinking
Logger in error	Red	Slowly
Recording	Cyan	Still
Idle status	Green	Still

Here is more information about the EV05:

https://www.aim-sportline.com/download/doc/eng/evo5/EV05_106_eng.pdf

Product information

Insert the SD card

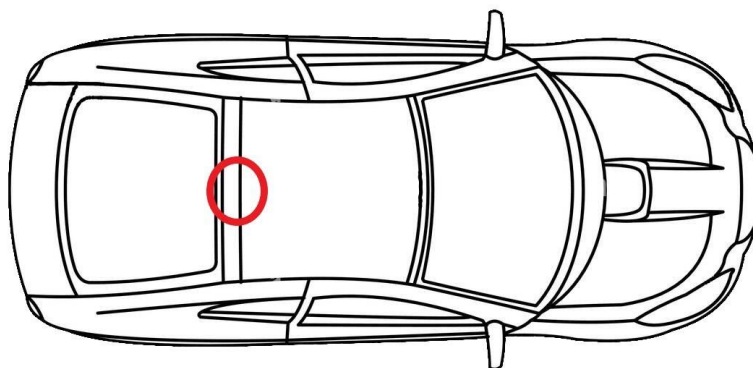
The SD cards are provided by the Scrutineering but the competitors themselves are responsible to insert correctly the SD card.

For introduce the SD card into the EV05, you need to unscrew the bolt next to the led situated on the top of EV05 and raise the small cover, then the card must be inserted until it makes a "click" (if it has not made the "click", turn the card over).



GPS antenna

The GPS antenna must be mounted on the roof without no other antenna in 0.5m radius.



The GPS must be connected directly to the EV05; it does not have to be connected to the camera. Because the camera receives the GPS signal through a cable that connects the camera to the EV05.

The correct connection can be seen in the [Wiring scrutineering data logger](#).

Manifold pressure

To measure intake pressure and turbo pressure, the AIM X05PSA00005B10AK pressure sensor with an absolute range of 0-5 bar must be used.



Technical characteristics	Value
Supply	8-16 V
Accuracy	<±0.5% FS (CLNH-combined non-linearity and hysteresis)
Characterisation	500 mV/-1 bar 450 mV/4 bar
Consumption	<10mA
Temperature working range	from -20°C to 135 °C
Waterproof	IP66
Housing	316 stainless steel
Weight	30g
Cable length	400 mm
Threads	M10

For measure the intake pressure, the sensor can be connected directly to the manifold, but to measure the turbo pressure, a tube must be connected to the manifold and the pressure sensor to this tube, fixed to the chassis, avoiding vibrations and heat. To facilitate installation there are sensor cable extensions.

Depending on the demand and the needs of each championship, the AIM pressure sensor X05PSA00005B10K with 0-5 bar could also be used, installed in the same way as the previous one. Whenever it is approved by the Scrutineering of each race.

Pin out scrutineering data logger

The EV05 needs to be connected to the car with a cable (SDL). Every cable, it can be different for each car, depends on the connection that the manufactures have for the Scrutineering.

Therefore, the cable is connected with the EV05 with a DTM06-6S and to the car with the specific connection for it. As the image.

DTM06-6S	
1 V Battery	Red
2 Ground	Black
3 CAN +	White
4 CAN -	Blue

It is very important to inform the Scrutineering what is the connector that the car needs because if not, the connexions can be wrong and the EV05 will not work.

Product information

CAN stream information

For the communication between the car (ECU) and the data logger we need the stored CAN stream. It is the manufacturer's job to provide this information but if you have this information please, fill this form to complete the process:

http://www.aim-scrutineering.com/CAN_Specifications_AIM_Scrutineering.xlsx

For the channels coming for the Logger SDL it is necessary to put in the correct form:

Channel name	Description	Notes
Pintake	Pressure upstream of intake system	Connected to Channel 1
Pmanifold 1	Pressure supercharging / NA (left)	Connected to Channel 2
Pmanifold 2	Pressure supercharging/NA (right)	Connected to Channel 3

It is very important to connect the sensors pressures as this table, to facilitate the job to Scrutineering. The correct connection can be seen in the [Wiring scrutineering data logger](#).

Order sheet

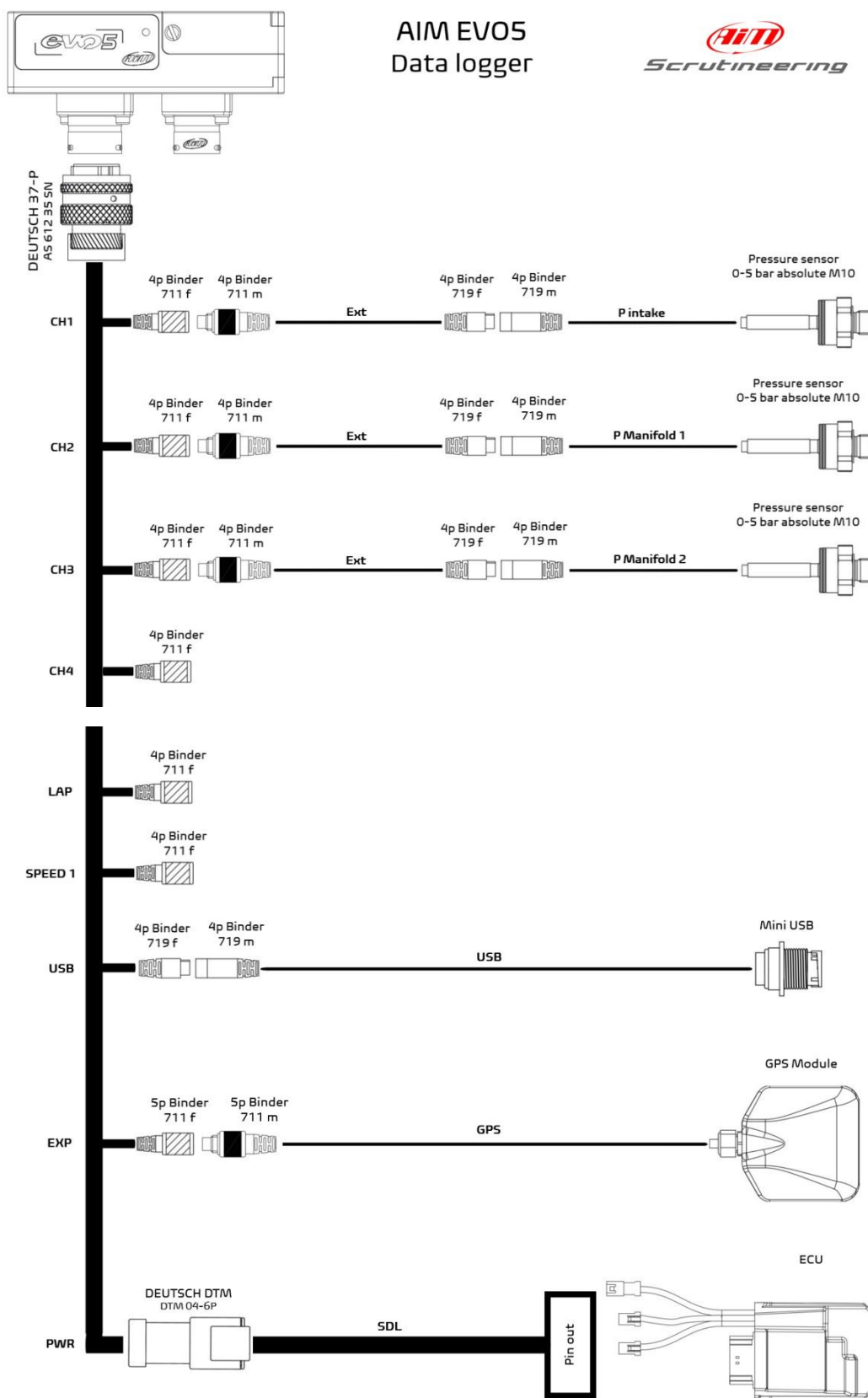
You can download the specific document with our prices in:

http://www.aim-scrutineering.com/ORDER_SHEET_CREVENTIC.xlsx

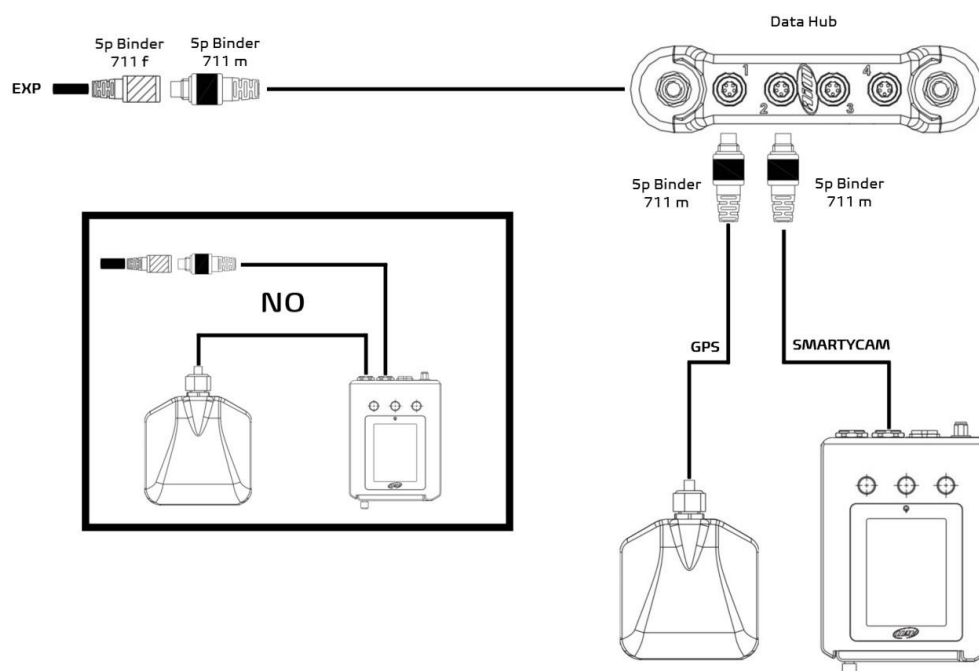
If you have any question or inquiry you can send an email to:

technical@aim-scrutineering.com

Wiring scrutineering data logger



SMARTYCAM CONNECTION

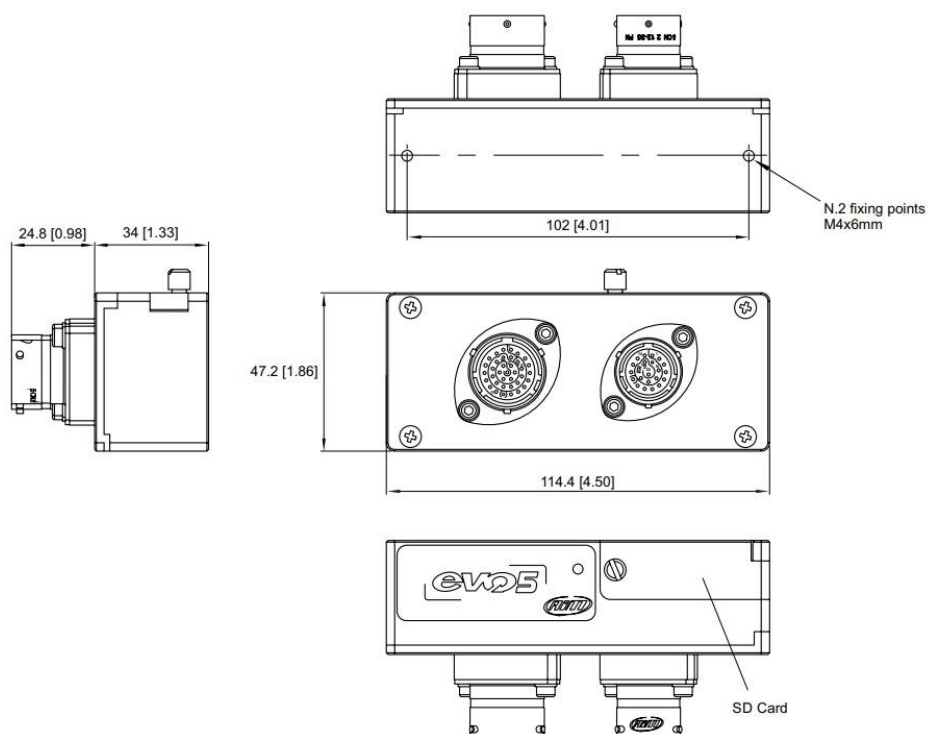


Product information

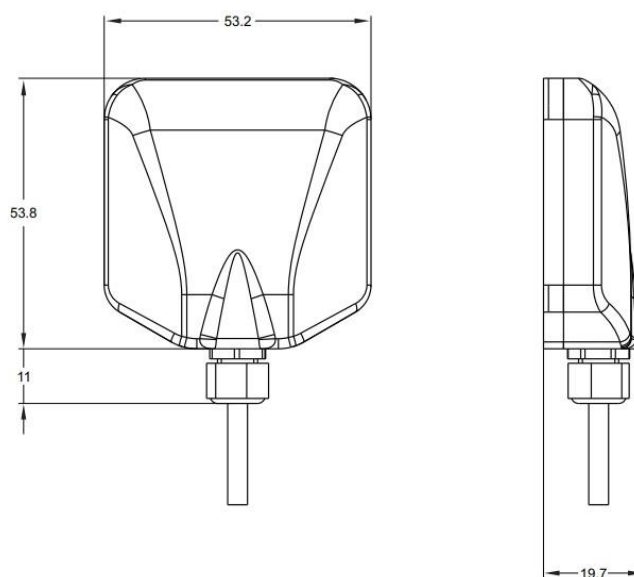
Dimensions

All measurements are in millimetres (mm), [inches].

Evo5

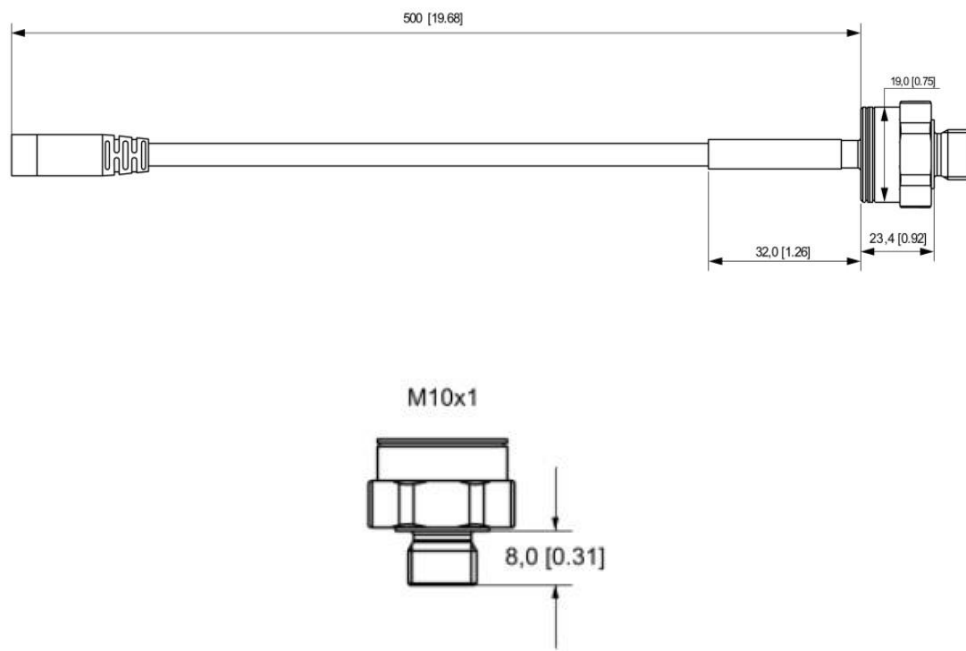


GPS Module

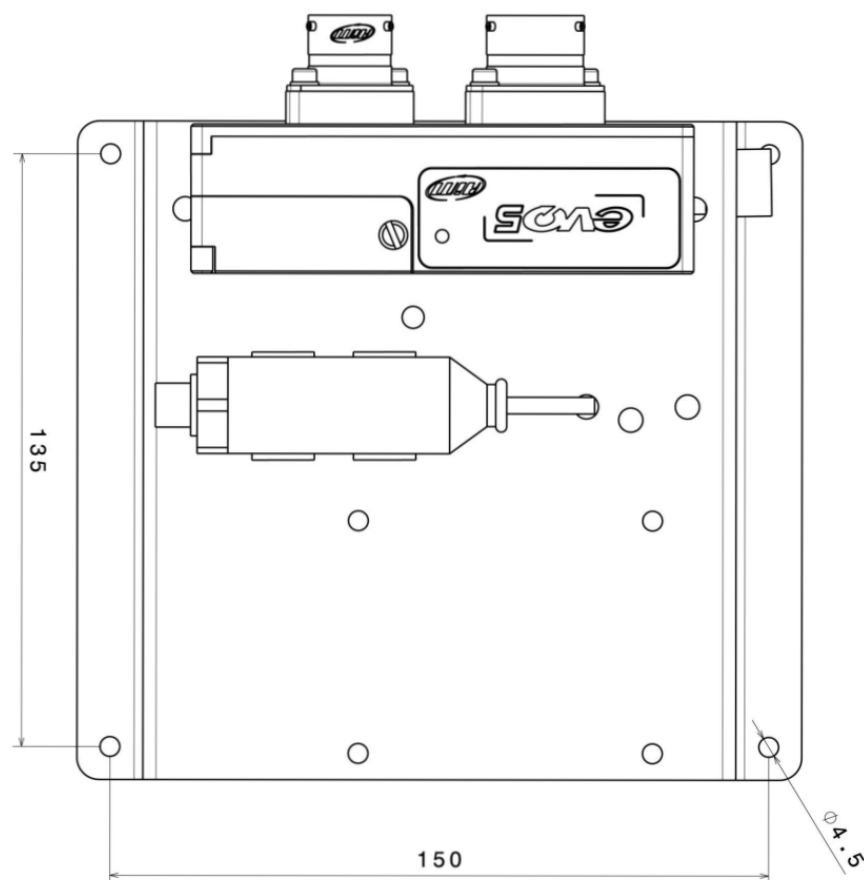


Product information

Pressure sensor



Data logger holder





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