

AiM InfoTech

AiM pressure sensor
0-5 bar
Race Studio 2 configuration

Release 1.01



1

Introduction

Once AiM pressure sensor 0-5 bar is physically connected to one of the device analog channels, it has to be loaded in the related configuration using AiM configuration software. In this datasheet it is loaded using **Race Studio 2** software.

You can proceed in two ways: importing the sensor configuration file, downloading it from the Products – Sensors (car/bike) section of our website www.aim-sportline.com, or creating a custom sensor.

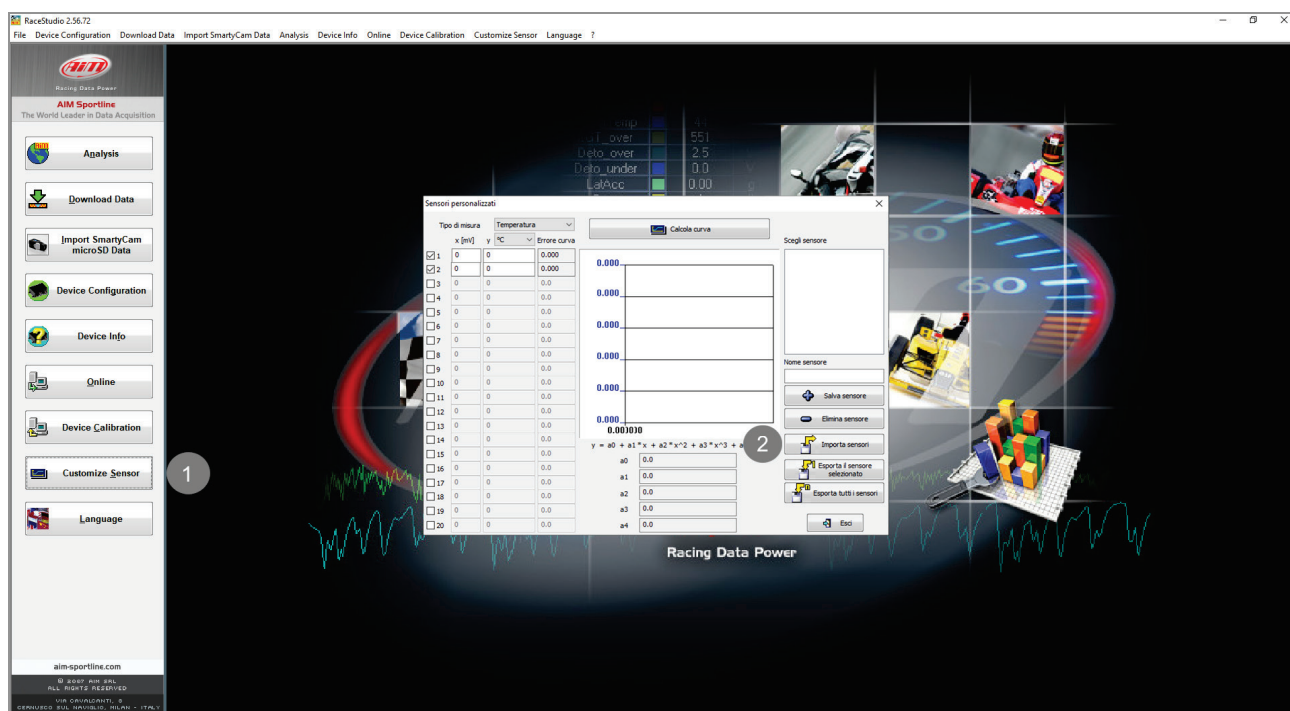
2 SCF* file import

To obtain the sensor configuration file, enter the Products – Sensors (car/bike) section of the AiM website www.aim-sportline.com, and click the link referred to the sensor you own (following image). Once the download is finished, save the file in a PC folder.

PRESSURE SENSORS						
Turbo pressure sensor from -1 to 3 Bar	X05SNP31004A		Datasheet	RS3 conf	RS2 conf	SCF*
Pressure sensor 0-10 bar/0-145 PSI	X05SNP31010R		Datasheet	RS3 conf	RS2 conf	SCF*
Pressure sensor 0-100 bar/0-1450 PSI	X05SNP31100R		Datasheet	RS3 conf	RS2 conf	SCF*
Pressure sensor 0-160 bar/0-2320 PSI	X05SNP31160R		Datasheet	RS3 conf	RS2 conf	SCF*
VDO pressure sensor 0-5 Bar	X05SNBO05		Datasheet	RS3 conf	RS2 conf	
VDO pressure sensor 0-10 Bar	X05SNBO00		Datasheet	RS3 conf	RS2 conf	

*Download the sensor configuration file ready to import in RS2

To import the file in Race Studio 2, making it available in the pressure sensors list, from the Customize Sensors window (1), click Import Sensors (2) and select the saved file.



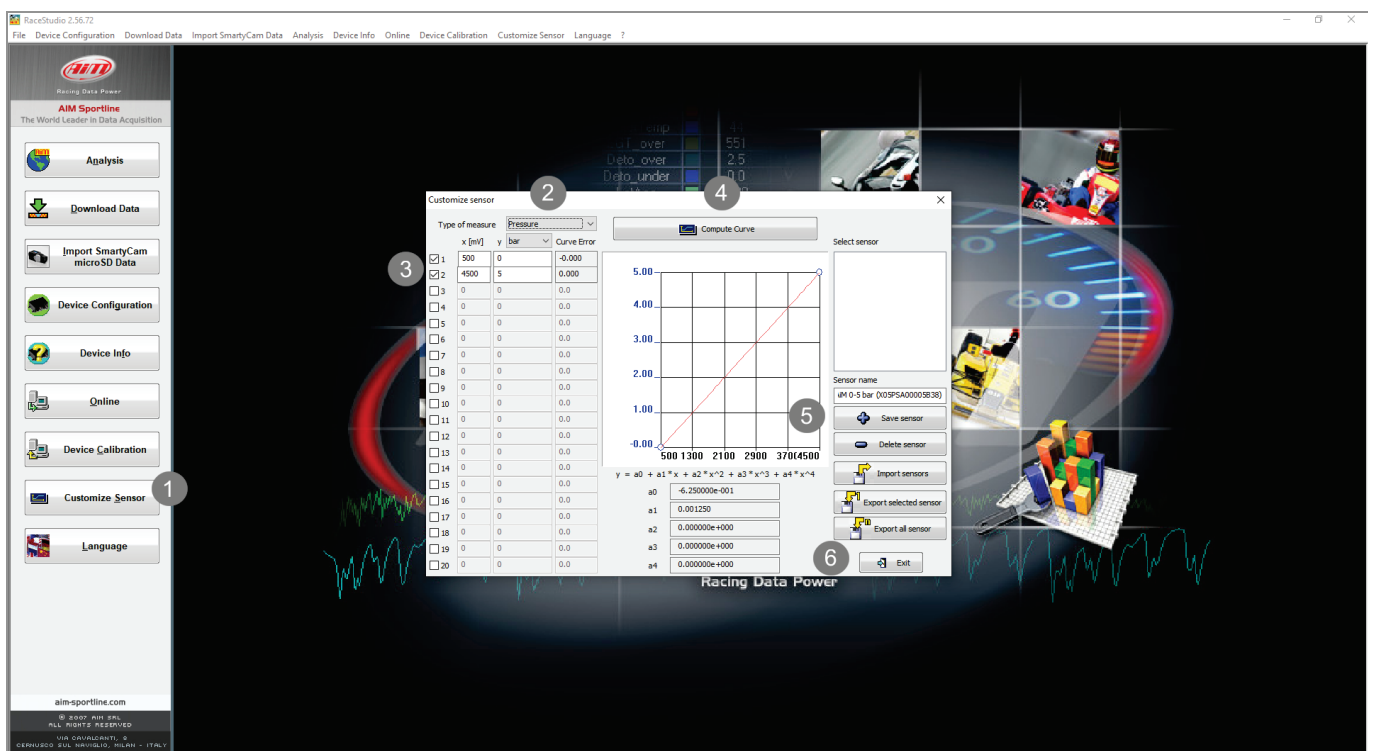
3

Custom sensor creation

- create a custom sensor pressing "Customize sensor" **(1)**
- select the type of measure (Pressure) and the measure unit (bar) **(2)**
- complete the first two rows of the table on the left as follows **(3)**:

X [mV]	Y [bar]
500	0
4500	5

- press "Compute curve" **(4)**, fill in sensor name - in the example "AiM 0-5 bar (X05PSA00005B38K)" – and press "Save sensor" **(5)**; press "Exit" **(6)**



The screenshot shows the 'Customize sensor' dialog box in the RaceStudio 2.56.72 software. The dialog box is divided into several sections:

- Table:** A table with columns 'x [mV]', 'y [bar]', and 'Curve Error'. The first two rows are filled with the values 500, 0 and 4500, 5 respectively.
- Graph:** A graph showing the relationship between X and Y. The X-axis ranges from 500 to 4500, and the Y-axis ranges from 0.00 to 5.00. A red line represents the curve.
- Sensor name:** A text field containing the name 'AiM 0-5 bar (X05PSA00005B38K)'.
- Buttons:** Buttons for 'Compute Curve', 'Save sensor', 'Delete sensor', 'Import sensors', 'Export selected sensor', 'Export all sensor', and 'Exit'.

Numbered callouts indicate the steps for creating a custom sensor:

- 1: Click on 'Customize sensor' in the left sidebar.
- 2: Select 'Pressure' as the type of measure and 'bar' as the unit.
- 3: Complete the first two rows of the table.
- 4: Click on 'Compute Curve'.
- 5: Click on 'Save sensor'.
- 6: Click on 'Exit'.

4 Analog channel configuration

To set the sensor in the device configuration:

- enter "Channels" tab
- set the sensor on a channel selecting " AiM 0-5 bar (X05PSA00005B38K)" in sensor type column of the desired channel and transmit the configuration to the device.

