

AiM InfoTech

AiM pressure sensor 0-2000 PSI
Race Studio 2 configuration

Release 1.00





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Introduction

Once AiM pressure sensor 0-2000 PSI 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.

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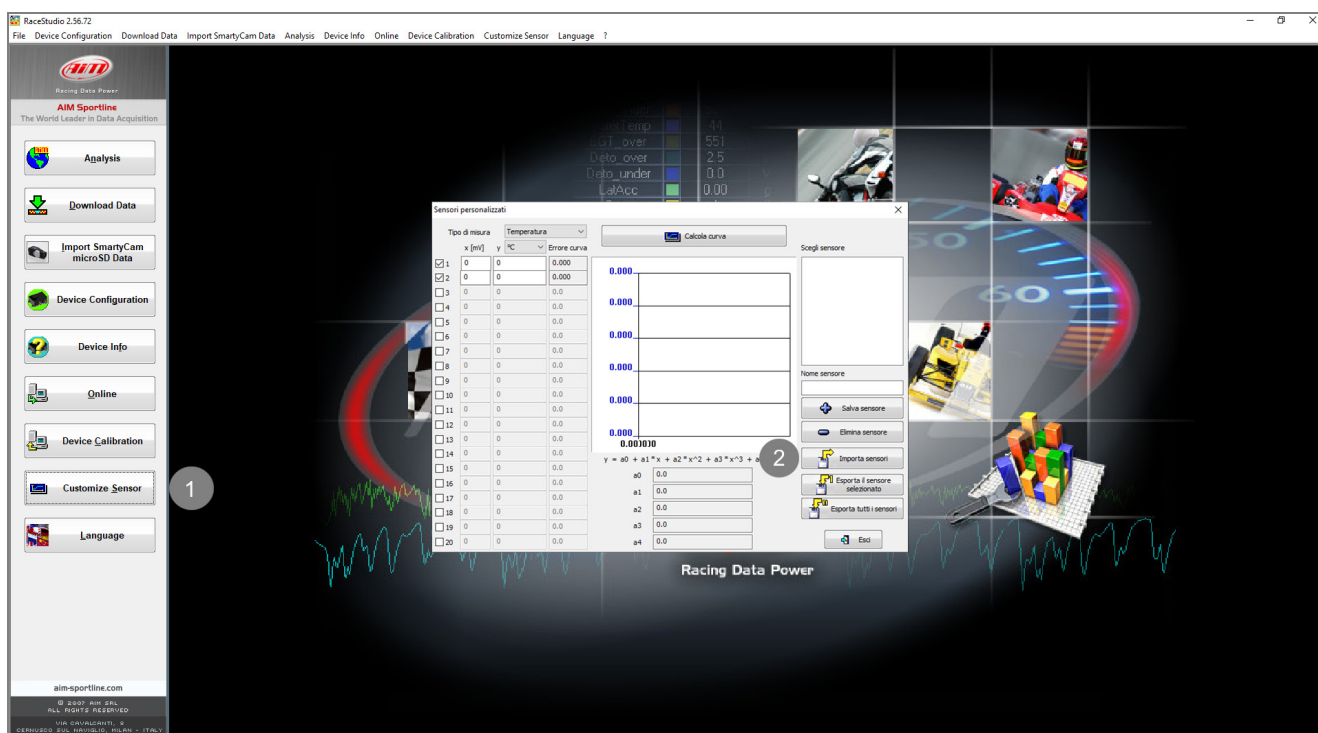
SCF* file import

To obtain the sensor configuration file, enter the Products – Sensors (auto/moto) 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.



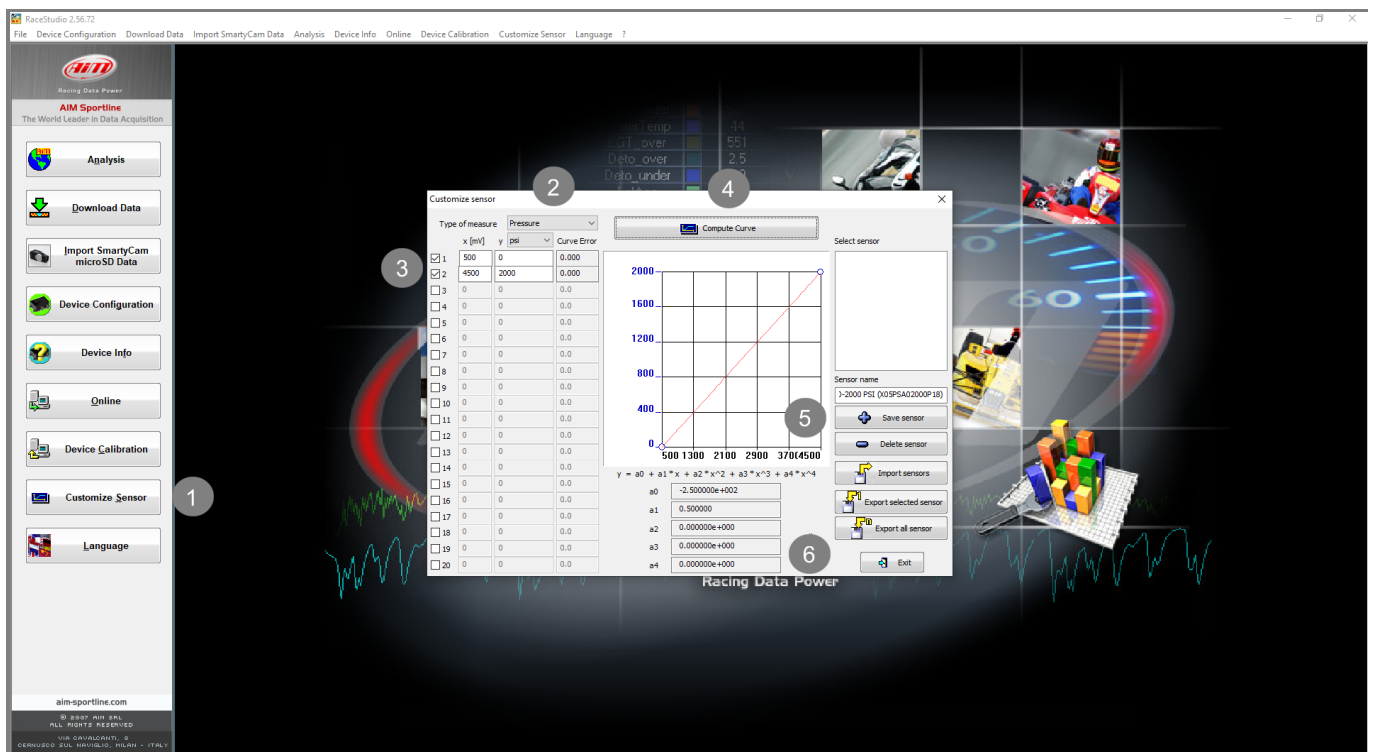
3

Custom sensor creation

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

X [mV]	Y [PSI]
500	0
4500	2000

- press "Compute curve" **(4)**, fill in sensor name - in the example "AiM 0-2000 PSI (X05PSA02000P18)" – 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:

- Left Panel:** A list of menu items including 'Analysis', 'Download Data', 'Import SmartyCam microSD Data', 'Device Configuration', 'Device Info', 'Online', 'Device Calibration', 'Customize Sensor' (highlighted with a red circle and '1'), and 'Language'.
- Table:** A table with columns 'x [mV]', 'y', and 'Curve Error'. The first two rows are filled with the values 500, 0 and 4500, 2000, respectively. The table is highlighted with a red circle and '3'.
- Graph:** A line graph showing the relationship between x and y. The x-axis ranges from 500 to 4500, and the y-axis ranges from 0 to 2000. A red line connects the two data points. The graph is highlighted with a red circle and '5'.
- Buttons:** A 'Compute Curve' button is highlighted with a red circle and '4'. Below the graph, there are input fields for 'Sensor name' (containing 'AiM 0-2000 PSI (X05PSA02000P18)'), 'Save sensor', 'Delete sensor', 'Import sensors', 'Export selected sensor', 'Export all sensor', and 'Exit'.

4 Analog channel configuration

To set the sensor in the device configuration:

- enter "Channels" tab
- set the sensor on a channel selecting "AiM 0-2000 PSI (X05PSA02000P18)" in sensor type column of the desired channel and transmit the configuration to the device.

