

AiM Infotech

Configuration
with Race Studio 2
of AiM pressure sensor
0-15 PSI

Release 1.00



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Introduction

Once AiM pressure sensor 0-15 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 www.aim-sportline.com Products → Sensors → Pressure and click the link of your sensor. Once the file downloaded, save it in a PC folder.

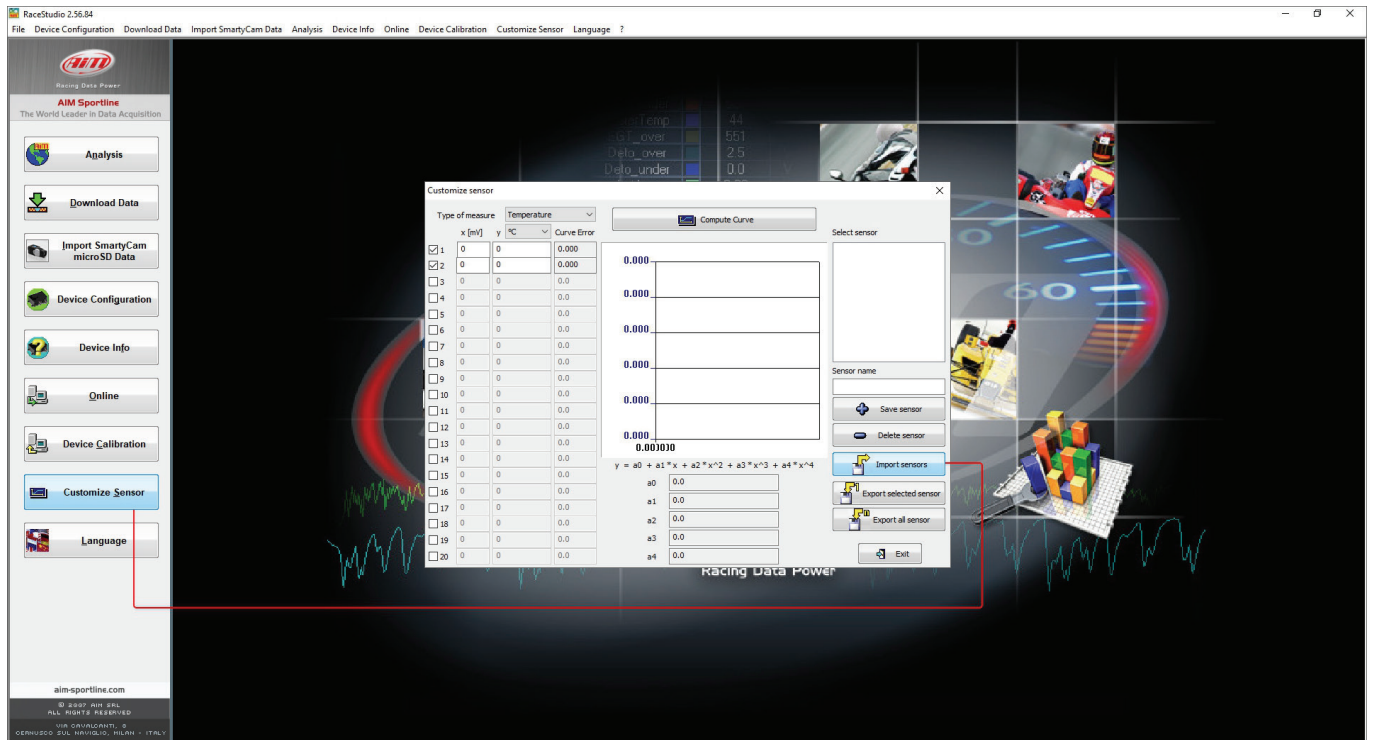
SENSORI DI PRESSIONE

Sensore di pressione 0-5 bar		M10 3/8 24	X05PSA00005B10K X05PSA00005B38K		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-5 bar assoluto		M10 3/8 24	X05PSA00005B10AK X05PSA00005B38AK		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-10 bar		M10 1/8 NPT 3/8 24	X05PSA00010B10K X05PSA00010B18K X05PSA00010B38K		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-100 bar		M10 3/8 24	X05PSA00100B10K X05PSA00100B38K		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-160 bar		M10 3/8 24	X05PSA00160B10K X05PSA00160B38K		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-15 PSI		1/8 NPT	X05PSA00015P18		Datasheet	RS3 conf		SCF*
Sensore di pressione 0-50 PSI		1/8 NPT	X05PSA00050P18K		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-50 PSI assoluto		1/8 NPT	X05PSA00050P18AK		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-150 PSI		1/8 NPT	X05PSA00150P18K		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-300 PSI		1/8 NPT	X05PSA00300P18K		Datasheet	RS3 conf	RS2 conf	SCF*
Sensore di pressione 0-2000 PSI		1/8 NPT	X05PSA02000P18K		Datasheet	RS3 conf	RS2 conf	SCF*

*Scarica il file della configurazione del sensore pronto da importare in RS2

To import the file in Race Studio 2, making it available in the pressure sensors list:

- Run Race Studio 2
- Press Customize sensor on the left keyboard
- "customize sensor" panel is prompted: press "Import Sensors"
- browse your PC and select the file you downloaded



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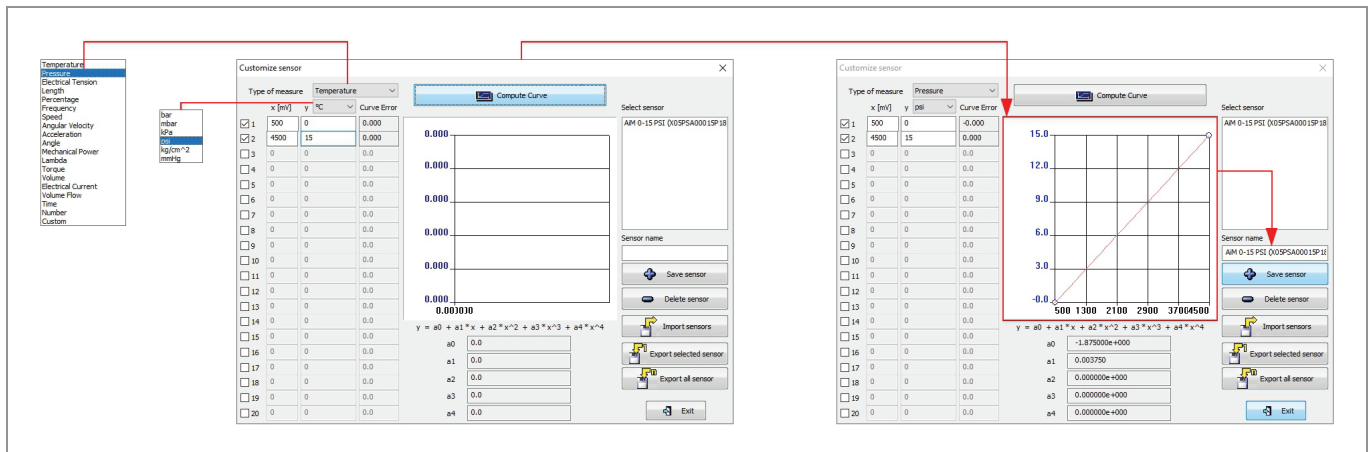
Custom sensor creation

To create a custom sensor, once pressed "Custom sensor" you need to set the related.

- select:
 - type of measure: Pressure
 - measure unit: PSI
- complete the first two rows of the table top left of the panel as follows:

X [mV]	Y [PSI]
500	0
4500	50

- press "Compute curve"
- fill in sensor name – In the example "AiM 0-15 PSI (X05PSA00015P18)"
- press "Save sensor" and "Exit" on the panel right keyboard



The image displays two side-by-side screenshots of the 'Customize sensor' software interface, illustrating the steps to create a custom sensor.

Left Screenshot (Temperature Sensor):

- Type of measure:** Temperature
- Y Unit:** °C
- Table Data:**

X [mV]	Y [°C]
500	0
4500	15
- Graph:** A linear fit curve is shown on a grid.
- Sensor name:** AiM 0-15 PSI (X05PSA00015P18)
- Buttons:** Compute Curve, Save sensor, Delete sensor, Import sensors, Export selected sensor, Export all sensor, Exit.

Right Screenshot (Pressure Sensor):

- Type of measure:** Pressure
- Y Unit:** PSI
- Table Data:**

X [mV]	Y [PSI]
500	0
4500	15
- Graph:** A linear fit curve is shown on a grid.
- Sensor name:** AiM 0-15 PSI (X05PSA00015P18)
- Buttons:** Compute Curve, Save sensor, Delete sensor, Import sensors, Export selected sensor, Export all sensor, Exit.

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Analog channel configuration

To set the sensor in the device configuration:

- enter "Channels" tab
- set the sensor on a channel selecting "AiM 0-50 PSI (X05PSA00015P18)" in sensor type column of the desired channel and transmit the configuration to the device.

System manager

Current configuration

Installation name	Data logger type	Ecu	Lap Timer	Vehicle name	Available time	Time with GPS	Total frequency	Master frequency	Expansions frequency	Tot. Expansions
DEFAULT	MXL PSTA	None - None	Optical	DEFAULT	9.32.39 (h.m.s)	4.06.35 (h.m.s)	121 (Hz)	121 (Hz)	0 (Hz)	0

Select configuration Channels System configuration CAN Expansions configurator

Speed_1

Wheel circumference (mm) 1666

Pulses per wheel revolution 1

Channel identifier	Enabled/disabled	Channel name	Sampling frequency	Sensor type	Measure unit	Low scale	High scale
RPM	☒ Enabled	Engine	10 Hz	Engine revolution speed	rpm	0	20000
SPD_1	☒ Enabled	Speed_1	10 Hz	Speed	km/h .1	0.0	250.0
CH_1	☒ Enabled	Channel_1	10 Hz	Generic linear 0-5 V	V .1	0.0	5.0
CH_2	☒ Enabled	Channel_2	10 Hz	Generic linear 0-50 mV	V .1	0.0	5.0
CH_3	☒ Enabled	Channel_3	10 Hz	SEAT Brake Pressure	V .1	0.0	5.0
CH_4	☒ Enabled	Channel_4	10 Hz	SEAT Engine Pressure	V .1	0.0	5.0
CH_5	☒ Enabled	Channel_5	10 Hz	SEAT Water Temperature	V .1	0.0	5.0
CH_6	☒ Enabled	Channel_6	10 Hz	Water Temp Suzuki GSXR	V .1	0.0	5.0
CH_7	☒ Enabled	Channel_7	10 Hz	Oil Press Suzuki GSXR	V .1	0.0	5.0
CH_8	☒ Enabled	Channel_8	10 Hz	Status signal	V .1	0.0	5.0
CALC_GEAR	☐ Disabled	Calculated_Gear	10 Hz	Water Temp Yoshimura	V .1	0.0	5.0
ACC_1	☒ Enabled	Latacc	10 Hz	Temp Weber ATS 04 (1200 Ohm)	#	0	9
LOG_TMP	☒ Enabled	Datalogger_Temp	10 Hz	Oil pressure Nagano KM10	g .01	-3.00	3.00
BATT	☒ Enabled	Battery	1 Hz	AiM Lambda LCU-CNE (0.65 - 1.6 lambda)	°C	0	50

AiM 0-15 PSI (X05PSA00015P18)