AiM InfoTech

AiM pressure sensor 0-2000 PSI Race Studio 2 configuration

Release 1.00





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1 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.



2 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.

Turbo pressure sensor from -1 to 3 Bar	X05SNP31004A	19	Datasheet	RS3 conf	RS2 conf	SCF*
Pressure sensor 0-10 bar/0-145 PSI	X05SNP31010R	9	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	۲	Datasheet	RS3 conf	RS2 conf	
VDO pressure sensor 0-10 Bar	X05SNBO00		Datasheet	RS3 conf	RS2 conf	

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.



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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)



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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.

	😧 System manager												
Racing Data Power	Transmi	Transmit Receive CAN-Net info		SmartyCam setti	setting Set acquisition system		system time						
AIM Sportline	Current configuration												
World Leader in Data Acquisition	Installation name	Data logger type	Ecu	Lap Timer	Vehicle n		vailable time	Time with GPS	Total frequency	Master freque		Expansions frequency	Tot. Expansions
A <u>n</u> alysis		MXL PISTA	None - None CAN-Expansions configurator	Optical	DEFAULT		8.48.56 (h.m.s)	3.58.06 (h.m.s)	131 (Hz)	131 (Hz)		0 (Hz)	0
Download Data	Speed_1 Wheel circumference Pulses per wheel revolu												
Import SmartyCam microSD Data	Channel identifier	Enabled/disabled	Channel name			Sampling frequency	Senso	or type	Me	sure unit	Low scale	Hig	h scale
	RPM	🖾 Enabled	Engine			10 Hz	🖃 Engin	e revolution speed	rpn		0	200	00
	SPD_1	Enabled	Speed_1			10 Hz	L Speed		🖃 km		⊥ 0.0	250	.0
Device Configuration	CH_1	Enabled	Channel_1			10 Hz		ric linear 0-5 V	⊻ v .		• 0.0	5.0	
)	CH_2	Enabled	Channel_2			10 Hz		ric linear 0-5 V	⊥ v .		- 0.0	5.0	
	CH_3	Enabled	Channel_3			10 Hz		ric linear 0-5 V	⊻ v .		≥ 0.0	5.0	
Device Info	CH_4	Enabled	Channel_4			10 Hz		ric linear 0-5 V	~ <mark>V.</mark>		⊥ 0.0	5.0	
	CH_5	Enabled	Channel_5			10 Hz	→ Oil pr	essure Nagano KM10 .ambda LCU-ONE (0,65 - 1,6 lamb	~ V .		.0.0	5.0	
Qnline	CH_6	Enabled	Channel_6			10 Hz					≥ 0.0	5.0	
	CH_7	Enabled	Channel_7			10 Hz 10 Hz	Fuel I	evel RACE_SP35_Pressure sensor	V .		- 0.0 - 0.0	5.0	
	CH_8 CALC_GEAR	Enabled	Channel_8 Calculated_Gear			10 Hz	AEM	30 PSI Press sensor 30 PSI INHg/PSI Press sensor	V .		0.0	5.0	
Device Calibration	ACC_1	Enabled	LatAcc			10 Hz			-		-3.00	3.00	
Device Calibration	LOG_TMP	Enabled	Datalogger_Temp			10 Hz	GM 3	Bar Map sensor	9. °C		-3.00	50	,
	BATT	Enabled	Battery			1 Hz		150 PSI Press sensor 30 1000 PSI Press sensor	V.		5.0	15.0	
Customize <u>S</u> ensor	10031 I	* Ensered	oncly				Delph Texse Texse PRS-8 PRS-8	ii IAT #25036751 Temp sensor nse INFKL 800 C IR Temp sensor nse INFKL 200 C IR Temp sensor nse INFKL 150 C IR Temp sensor 131 0-50 PSI MAP absolute 132 0-15 PSI 134 0-50 PSI			200	124	
							PRS-8 PRS-8 PRS-8 AiM 0 AiM 0 AiM 0 AiM 0 AiM 0	137 0-150 PSI 138 0-300 PSI 138 0-2000 PSI 1-10 bar (X05PSA00010B10) 1-50 bar (X05PSA00005B38) 1-10 bar (X05PSA00100B38) 1-50 PSI (X05PSA00100B10)					
alm-sportline.com							AiM	1-100 bar (X05PSA00100B38) 1-150 PSI (X05PSA00150P18) 1-160 Bar (X05PSA00160B10) 1-2000 PSI (X05PSA02000P18)	×				