

AiM Infotech

AiM Car/Bike
Tire temperature
optical sensor

Release 1.05





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Introduction

This datasheet shows how to install the tire temperature optical sensor for car/bike applications. AiM loggers can measure tire temperature connecting to one or more temperature sensors directly connected to the measure points. The sensor **part number** is:

- Tyre temperature optical sensor: **X05TTS01B0**

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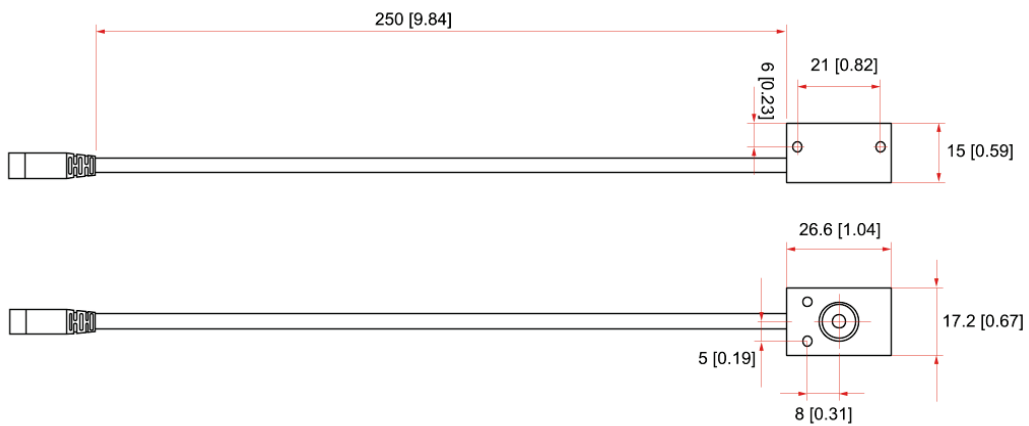
Installation and connection

Use a self-built bracket to install the sensor; place it far from strong heat sources (like the exhaust pipe for instance) and from electromagnetic interference sources. The best installation point is the internal part of the fender so to avoid that the sensor get damaged bumping stones or other stuff.

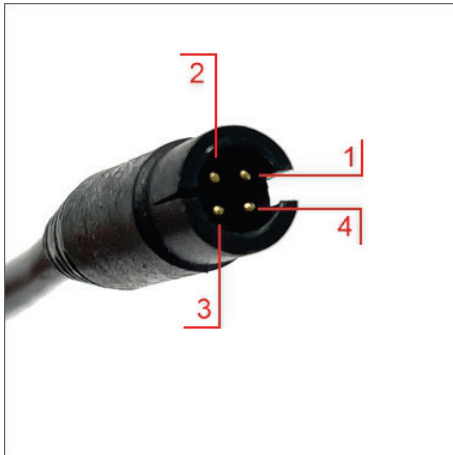
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Dimensions, pinout and technical characteristics

The drawing here below shows the sensor dimensions in millimetres [inches].



The sensor end with a 4 pins Binder 719 male connector. Here below the connector view – sensor side on the left and device side on the right – are shown; while in the following table is connector pinout



Pin

- 1
- 2
- 3
- 4

Function

- Analog signal
- GND
- Not connected
- +VReference

The sensor technical characteristics are:

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- Output signal
- Field of measure
- Working range
- Sensor electrical range
- Sensor dimensions
- IP
- Cable length

Valore

- 0-5V
- 35°
- 20/120°C
- 820 Mv/-20°C
- 3230 Mv/120°C
- 26.6x17.2 mm
- 65
- 250mm

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Extension cables

The sensor is sold with a 25 cm cable and standard lengths extension cables are available as optional; it is also possible to ask for specific length extension cables. Extension cables part numbers change according to their length and to the device the sensor is to be connected to.

Mandatory extension cable for connection with:

- EVO4
- EVO4S
- Channel Expansion
- MyChron Expansion

Part numbers:

- V02PCB05BTXG** – cable length: 500 mm
- V02PCB10BTXG** – cable length: 1000 mm
- V02PCB15BTXG** – cable length: 1500 mm
- V02PCB20BTXG** – cable length: 2000 mm
- V02PCB25BTXG** – cable length: 2500 mm
- V02PCB30BTXG** – cable length: 3000 mm



Extension cable for connection with:

- MXG 1.2/MXP/MXS 1.2
- MXS/MXG/MXL2
- MXm
- EVO5
- MXL/Pista/Pro05

Part numbers:

- V02PCB05B** – cable length: 500mm
- V02PCB10B** – cable length: 1000mm
- V02PCB15B** – cable length: 1500mm
- V02PCB20B** – cable length: 2000mm
- V02PCB25B** – cable length: 2500mm
- V02PCB30B** – cable length: 3000mm

