NEW PRODUCTS 2024

Index

AiM lives and breathes motorsport since 1995

AiM's journey started with karts in 1995 and since then the company has expanded in any field of motorsport. The mission is to create simple, effective and intuitive devices to improve vehicle, driver and team work performances thanks also to the technical support and dedicated softwares.
Loggers, GPS, steering wheels, ECUs, PDMs and video cameras are only some of the product lines that **AiM** continue to improve through the research department with more than 30 software/hardware developers and engineers on a total workforce of one hundred people.

Completely internal development of:

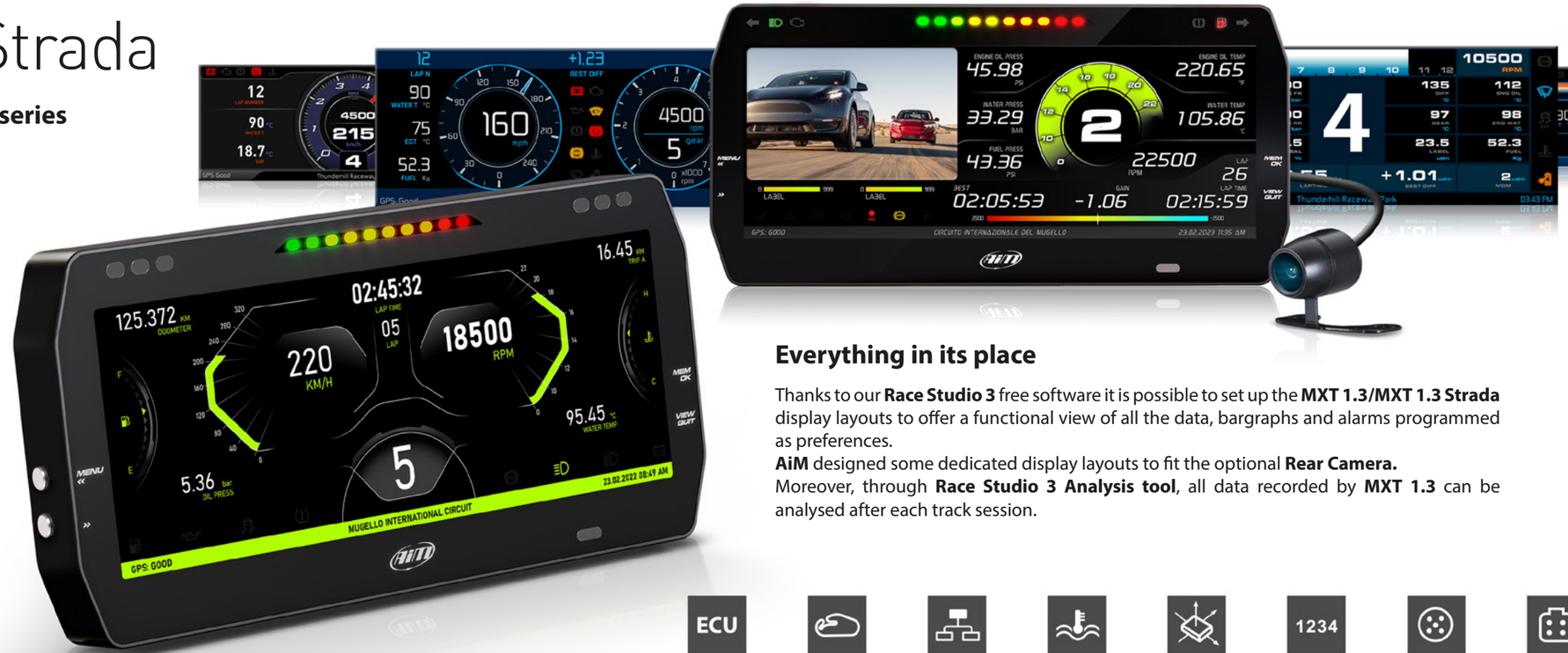
- HARDWARE
- FIRMWARE
- SOFTWARE
- MECHANICAL PARTS

MXT1.3/MXT 1.3 Strada

The widest Dash Logger & Dash of the MX series

MXT line is the new "big brother" of **MX** family with a 10" wide high contrast TFT display.
MX range is developed with the same core, connectors and features but available in different sizes: 5" for **MXS** line, 6" for **MXP**, 7" for **MXG** and now 10" for **MXT** line to cover the needs of the most demanding customers.

- 10" high contrast TFT display
- user configurable multi page display
- RGB alarm LEDs and icons
- 10 RGB LEDs shift lights array
- 3 CAN connections
- CAN, RS232 or K-Line ECU connections



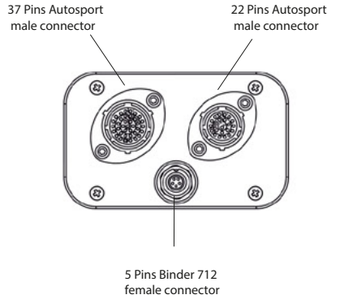
Everything in its place

Thanks to our **Race Studio 3** free software it is possible to set up the **MXT 1.3/MXT 1.3 Strada** display layouts to offer a functional view of all the data, bargraphs and alarms programmed as preferences.
AiM designed some dedicated display layouts to fit the optional **Rear Camera.**
Moreover, through **Race Studio 3 Analysis tool**, all data recorded by **MXT 1.3** can be analysed after each track session.

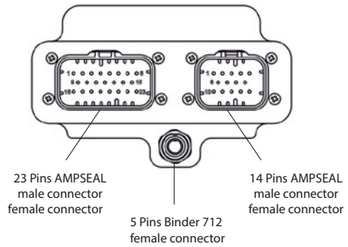
ECU Connection | GPS Module | Expansion | Analog/Digital inputs | Accelerometer | Math channels | Second CAN | Digital Outputs

Connections

MXT 1.3



MXT 1.3 Strada



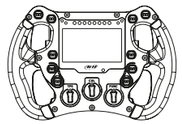
Technical specifications

	MXT 1.3	MXT 1.3 Strada
Display resolution	1280x480	
Ambient light sensor		
Alarm display icons	Freely configurable	
Shift lights	10 RGB LEDs	
Alarms	6 RGB LEDs	
CAN connections	3	
ECU connections	CAN, RS232 or K-Line	CAN or K-Line
Inertial platform	100 Hz 6 axis	-
Analog/Digital Inputs	8 configurable, digital-analog (0-5 V, 0-12 V) max 500 Hz each	
Digital inputs	4 speed inputs, coil RPM input	1 speed input, coil RPM input
Digital outputs	2 (max 1 A each)	1 (max 1 A)
GPS module	✓	Optional
Internal memory	4 GB	-
Integrated data logger	✓	-
Wi-Fi connection	✓	-
Analog camera input	✓	
Body	Anodized aluminum	
Connectors	37 pins Autosport + 22 pins Autosport + 5 pins Binder 712	23 pins AMPSEAL + 14 pins AMPSEAL + 5 pins Binder 712
Power consumption	400 mA	
Waterproof	IP67	
Expansions	Optional	
Race Studio 3 (Configuration & Analysis software)	Constantly updated and freely downloadable	

The Steering Wheel with integrated datalogger

SW4 is one of the most versatile steering wheels in the market thanks to its compatibility with a long list of ECU protocols and features all the functionalities of a data logger.
Pushbuttons, display pages and rotary switches are only some of the configurable items.

- 4 GB datalogger
- Easy connection to more than 2,000 ECUs
- 8 configurable pushbuttons - CAN output
- 2 free contacts pushbuttons
- 3 configurable rotary switches - CAN output
- 2 Shift paddles - CAN output and free contacts
- Configurable display pages
- Shift lights
- Multiple Expansions



Ø 270

Improvements

- Optimised structure makes it more robust and lighter.
- Redesigned pushbuttons with back-lit frame for higher visibility of the active LED status.
- New clutch and gear shift mechanism with carbon fiber paddles (optionals) for greatest accuracy.
- Protective cover constructed in carbon fiber and forged composite material.

Technical specifications

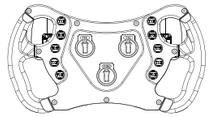
	SW4
Diameter	Ø 270 mm
Display	4.3" TFT
Resolution	800x480 pixels
Contrast	800:1
Brightness	800 cd/m2 - 1,100 Lumen
Ambient light sensor	Yes
Alarm display icons	Yes, configurable
Shift Lights	8 configurable RGB LEDs
Alarm LEDs	4 configurable RGB LEDs
CAN connections	3
ECU connection	CAN
ECU compatibility	2,000+ industry leading ECUs
CAN expansion	GPS Module, SmartyCams, ACC 2,Channel Expansion
Internal memory	4 GB
Body	Anodized Aluminum + Carbon fiber forged composite
Pushbuttons	10 pushbuttons + 3 rotary switches with RGB backlights
Connectors	1 Autosport 22 pins male connector
Dimensions	270 x 183.5 x 42.6 mm
Weight	1,900 g
Power consumption	500 mA
Waterproof	IP67

Here is our new GT32 Steering Wheel!

GT32 transmits in a freely configurable CAN connection the status of the 8 pushbuttons (while 2 of them feature free contacts connections), 3 rotary switches and paddles.

Completely configurable pushbuttons:

- Momentary
- Toggle
- Multistatus



Ø 320

Custom backlighting

RGB LEDs can be managed through math channels according to the status of the pushbuttons and/or the feedback coming from external devices.
They can be solid or blinking at a desired frequency and at the preferred light level. Finally, paddle shifts feature free contacts on a dedicated pin of the Autosport connector too.

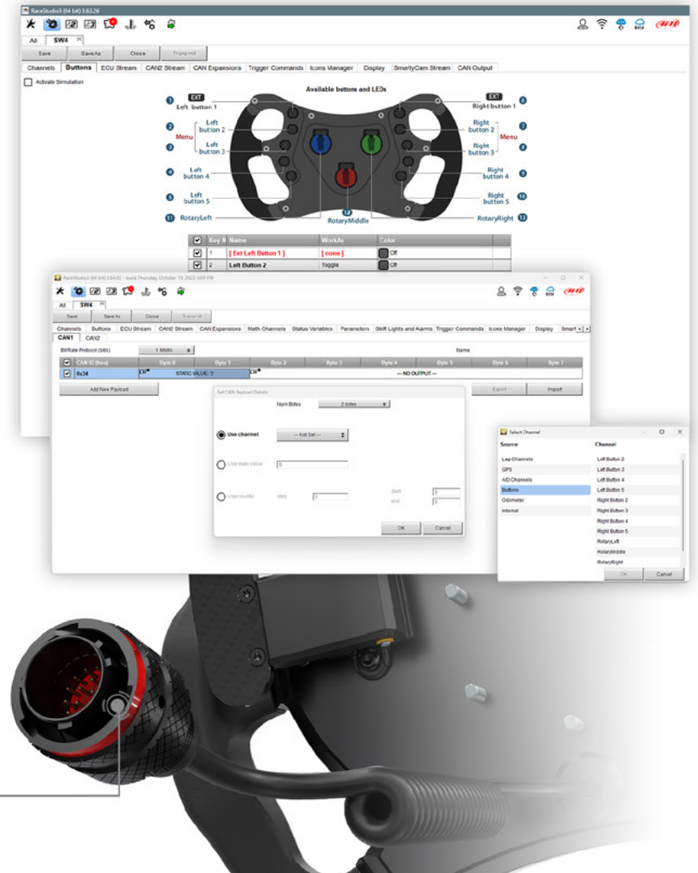
Available as an AiM expansion or as a completely standalone device.

Pushbuttons configuration

The RGB LEDs behind all 10 pushbuttons plus back-lit multi-position switches are designed to instantly find the right input in the heat of competition.
Every single LED can be fully programmed via **Race Studio 3**; they can work as momentary, toggle or multistatus and each option can be configured depending on the length of time the button is pressed or on other conditions according to specific needs.

CAN Output

The data stream of each button can be managed in the CAN output.
Through this function you can customize once more your own configuration setting up each detail: the number of bytes allocated, the data length code, byte order and the frequency from 1Hz to 100Hz.



Technical specifications

	GT32
Diameter	Ø 320 mm
CAN connections	1
Body	Anodized Aluminum
Pushbuttons	10 pushbuttons with RGB backlights
Rotary switches	3 rotary switches with RGB backlights
Connectors	1 Autosport 22 pins male connector
Dimensions	320 x 176 x 43 mm
Weight	2,600 g
Power consumption	500 mA
Waterproof	IP67

X Log

The compact datalogger by AiM

X Log is an extremely powerful and compact datalogger.

It records data coming from:

- ECU stream CAN: K-Line or RS232
- GPS: four constellations (GPS, GLONASS, BeiDou and Galileo), 25 Hz, with less than half a meter precision
- Internal 6 axis Inertial platform
- Expansions:
  - **ACC 2:** Analog inputs
  - **LCU-One S:** Lambda controller
  - **SmartyCam 3** series: Motorsport cameras

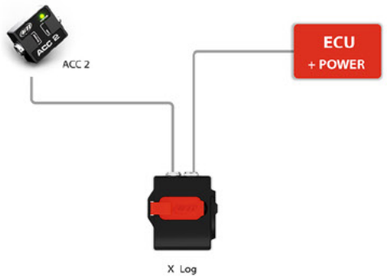
Then, it features:

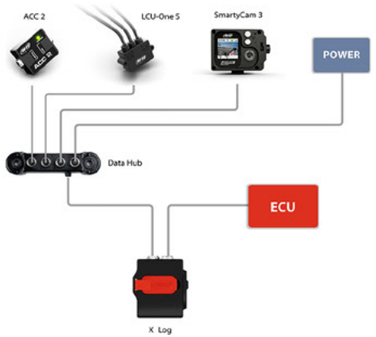
- Integrated Wi-Fi and Bluetooth
- Long lasting Lithium Battery and connection for an external 8-16V battery
- 4GB internal memory
- Removable USB Type-C key
- Waterproof (IP67)

Data Analysis

All data downloaded from **X Log** can be easily analyzed with the powerful **AiM** software **Race Studio 3**: histograms, scatters, diagrams, maps and even video recorded with a **SmartyCam** can help the rider understanding where and when changes and corrections are needed.

CONNECTION EXAMPLES





Technical specifications

	X LOG
Integrated track database	✓
Inertial platform	100 Hz 6 axis
GPS	25 Hz
Wi-Fi connection	✓
Bluetooth connection	✓
ECU connection	CAN, RS232 or K-Line to 1,000 + industry leading ECUs
RPM input	1
Pushbutton	1
Status LED	1
External power	9÷15 V
Connectors	5 pins Binder 712 7 pins Binder 712 USB Type-C
Memory	4 GB internal + removable USB Type-C key
Battery	Rechargeable lithium
Material	PA6 + 30% glass fiber reinforced
Dimensions	74.8 x 6.4 x 31.1 mm
Weight	60g
Waterproof	IP67

ECU Log

The smallest datalogger by AiM

ECU Log is the smallest datalogger to record data from your ECU.
Its dimensions are 61 x 44 x 27 mm only.

It records data coming from:

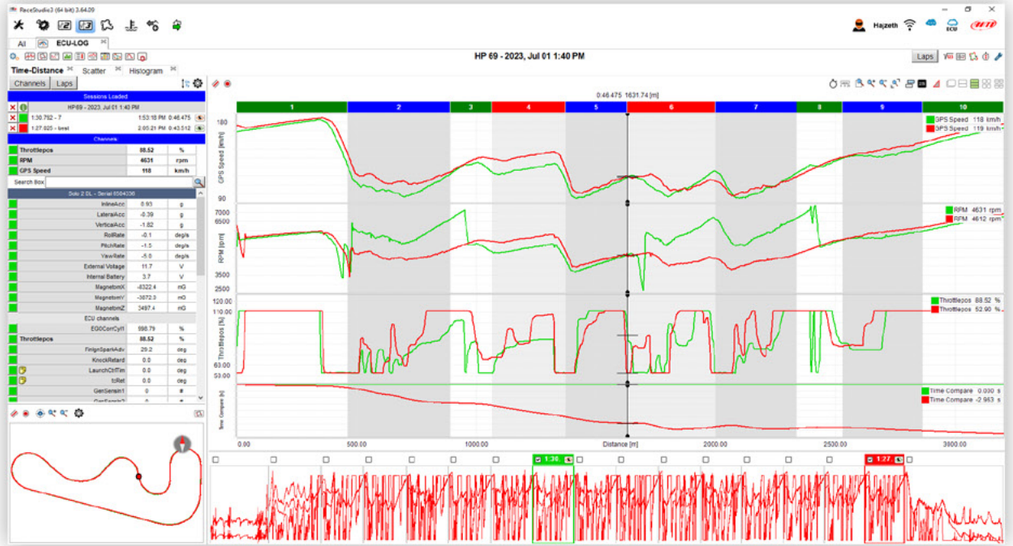
- ECU stream CAN: K-Line or RS232 connections
- Expansions:
  - **GPS09c:** GPS module
  - **ACC 2:** Analog inputs
  - **LCU-One S:** Lambda controller
  - **SmartyCam 3** series: motorsport cameras

Then, it features:

- ECU connection
- 4 GB internal memory
- Removable USB Type-C key
- Waterproof (IP67)

Compact, powerful, reliable

The reduced size of the **ECU Log** makes it ideal for motorcycle and any underseat compartment installation. The analysis of the performance is a key factor, all recorded data can be managed in **Race Studio 3 Analysis** with histograms, scatters, diagrams, maps and even videos recorded with a **SmartyCam** are automatically synchronized to the laps data for a better comparison.



A flexible system

It is simple to create a complete system with the new **ECU Log** designed by **AiM.**
Different expansions are available to cover most requirements.

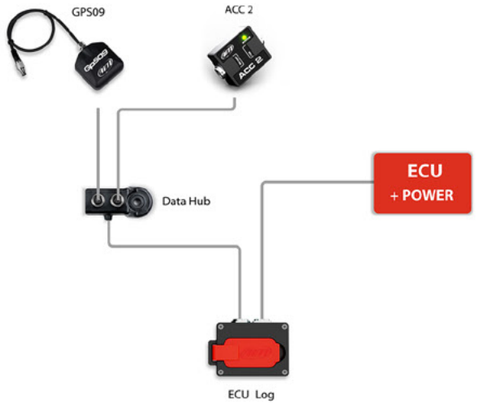
GPS09c
The coveted GPS by **AiM**

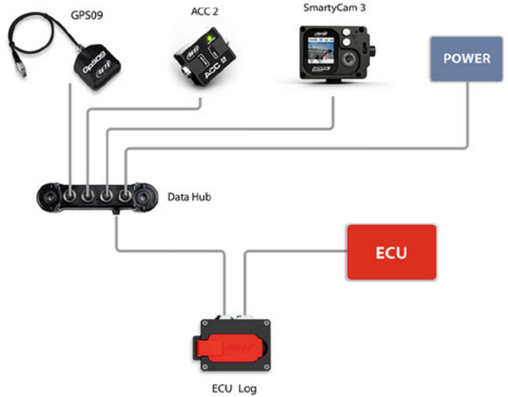
SmartyCam 3 series
Cameras with realtime data overlayed on videos

ACC 2
Compact CAN converter

LCU-One S
Reliable Lambda Controller

CONNECTION EXAMPLES





	ECU LOG
ECU connection	CAN, RS232 or K-Line to 1,000 + industry leading ECUs
External power	9÷15 V
Connectors	5 pins Binder 712 7 pins Binder 712 USB Type-C
Memory	4 GB internal + removable USB Type-C key
Material	PA6 + 30% glass fiber reinforced
Dimensions	61.4 x 44.7 x 27.2 mm
Weight	60g
Waterproof	IP67

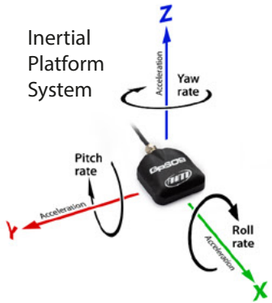
GpS09c

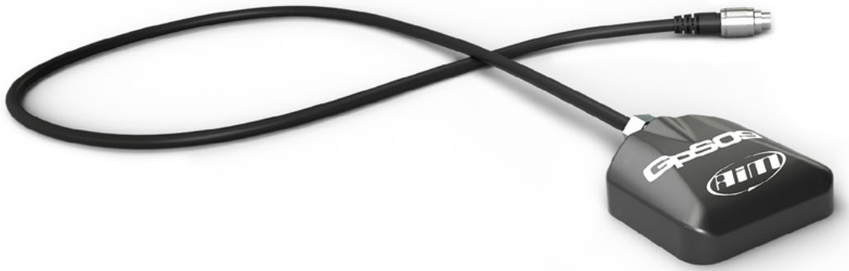
GPS09c has the following features:

- four constellations: GPS, GLONASS, Galileo, BeiDou
- 25 Hz
- 0.5 mt CEP accuracy
- 30 seconds cold start TTFF
- 1 second hot start
- Internal 22 mm antenna

GPS09c Pro adds an internal 100 Hz 6 axis IMU
to the features proposed by **GPS09c**

Roof version

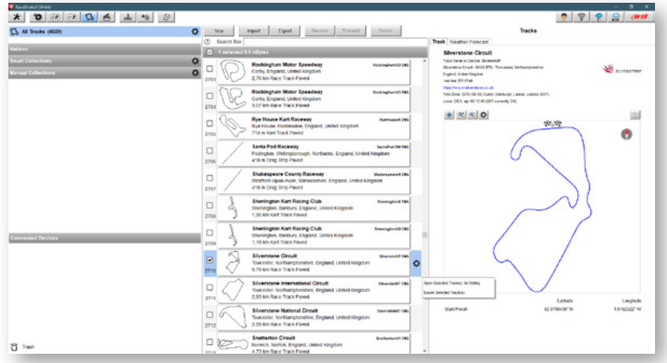




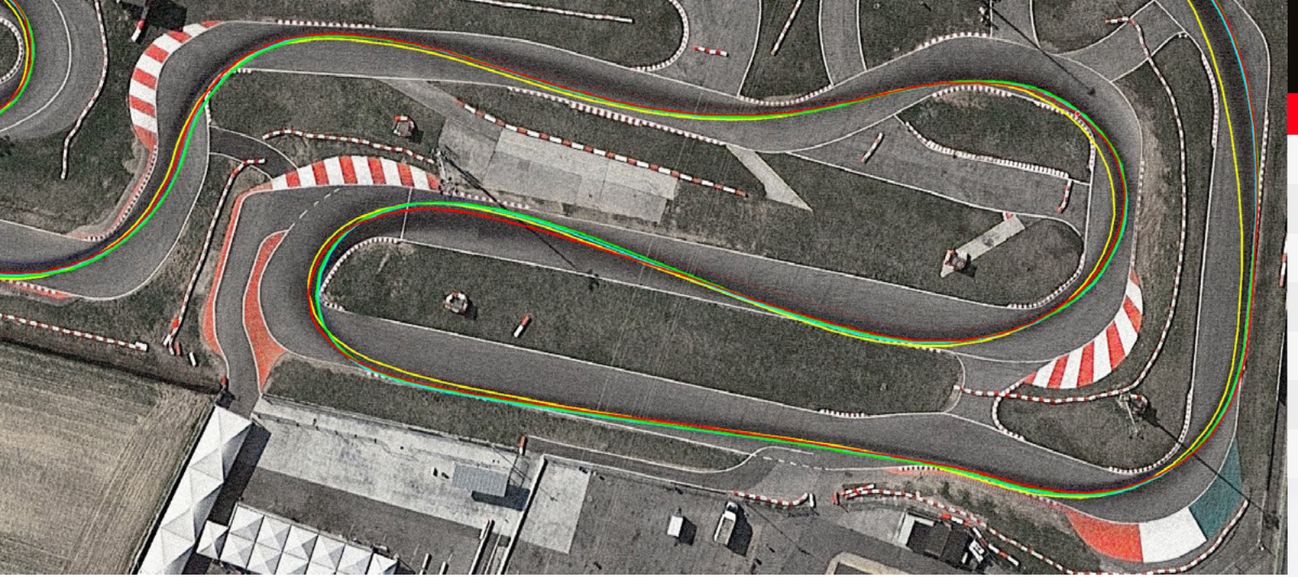
Standard version

Track database

The **GPS09c** is the basis of lap time and split time calculations of all **AiM** systems. They come with start/finish line coordinates of more than four thousand tracks, so your dash or logger automatically recognizes the track you are racing on, and will calculate lap times and split times.
What if the track is not in the database?
No problem, your system will recognizes a new track and then will calculate lap times.



Both **GPS09c** and **GPS09c Pro** have been developed in two different mechanical versions: Standard and Roof.
Vehicle with carbon fiber roof or reduced glass surface may limit the GPS signal: the **Roof** version is specifically designed to avoid signal loss.



Open version

GPS09c is also available in “Open Version” for transmitting the data via CAN to every system: configuring the output is very flexible, by setting IDs, messages, baud rate and frequency.
Of course, the “Open Version” can also be used as an AiM Expansion, without any issues or limitations.

Technical specifications

	GPS09c	GPS09c Pro	GPS09c Open	GPS09c Pro Open
GPS	25 Hz			
External power	5÷15 V			
Inertial Platform	-	100 Hz 6 axis	-	100 Hz 6 axis
Connection	AiM CAN		CAN, RS232	
Dimensions	53.2 x 53.8 x 19.7 mm (53.2 x 53.8 x 37.2 mm for Roof version)			
Weight	60.5 g (100g for Roof version)			
Waterproof	IP67			

ACC 2

ACC 2 is the new compact Analog CAN Converter.

It manages 4 analog inputs:

- Thermocouples
- Thermoresistances
- 0-5V
- 0-12V

to a max frequency
of 200 Hz each

Split harness

With **ACC 2** customers can choose, according to their needs, among 5 different split harnesses.
Up to 4 thermocouples or 4 analog channels 0-5V/0-12V are available.

SYSTEM CONNECTION EXAMPLE

SOLO 2 DL
Laptimer data logger

RS3 RACESTUDIO

4 analog channel
split harness

ACC 2
Analog CAN Converter

ECLIPSE
Linear potentiometers

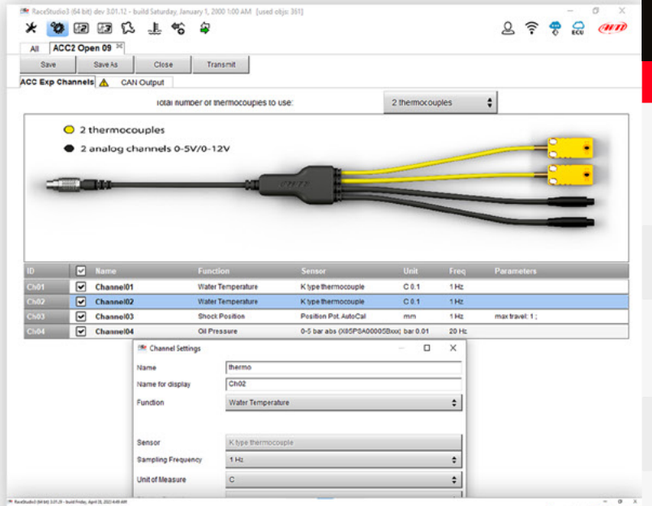
Temperature
and pressure
sensors

Open version

ACC 2 is also available in “Open Version” for transmitting the data via CAN to every system: configuring the output is very flexible, by setting IDs, messages, baud rate and frequency.
Of course, the “Open Version” can also be used as an AiM Expansion, without any issues or limitations.

RS3 Suspension Analysis

ACC 2 can be connected to **Eclipse sensors.**
All the acquired data by **AiM** linear potentiometers can be managed through the new **Suspension Analysis Tool** in Race Studio 3, for an even more complete performance analysis software.



Technical specifications

	ACC 2	ACC 2 Open
Analog channels	4 fully configurable channels, 24 bit, A/D, 200 Hz each: TC (with dedicated cable), TR, 0÷5 V, 0÷12 V	
External power	9÷15 V operational 12÷15 V fully operational	
Connection	AiM CAN	CAN, USB
Connectors	5 pins Binder 712 female 7 pins Binder 712 female	
Materials	PA6 30% glass reinforced	
Dimensions	44.0 x 38.0 x 19.8 mm	
Weight	50 g	

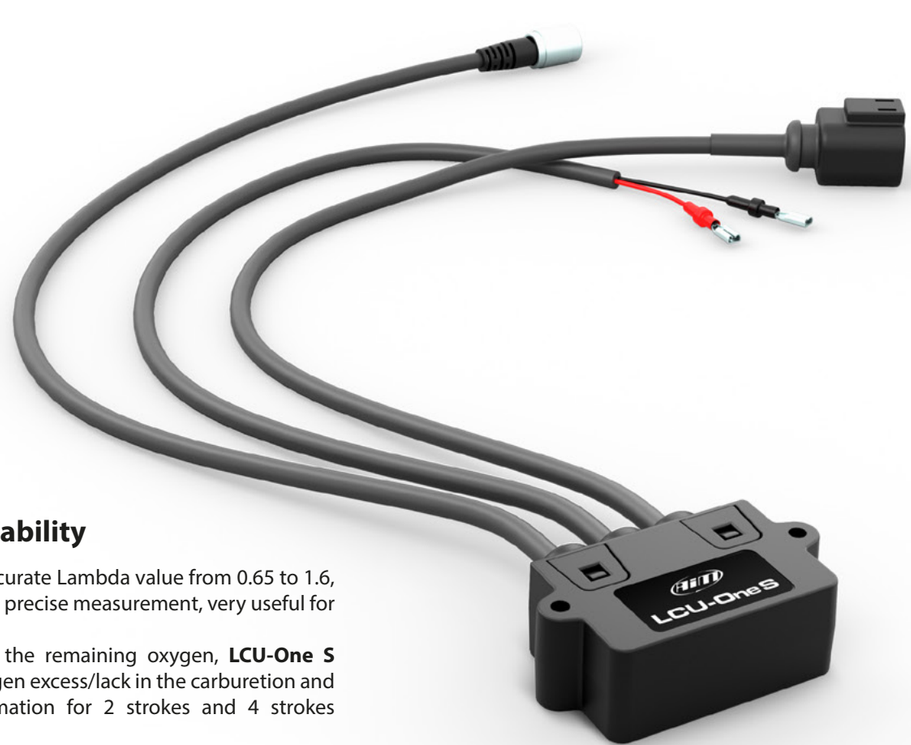
LCU-One S

Total control of your engine

LCU-One S controller allows to perfectly tune the carburetion of your engine to keeping it at its best and improve the engine's performances.
It uses a wide band Bosch LSU 4.9 sensor, used for its capacity of saving the original calibration for the duration of the sensor's life. In fact, Bosch LSU 4.9 probe has been designed to last for more than 100,000 km on a stock car.

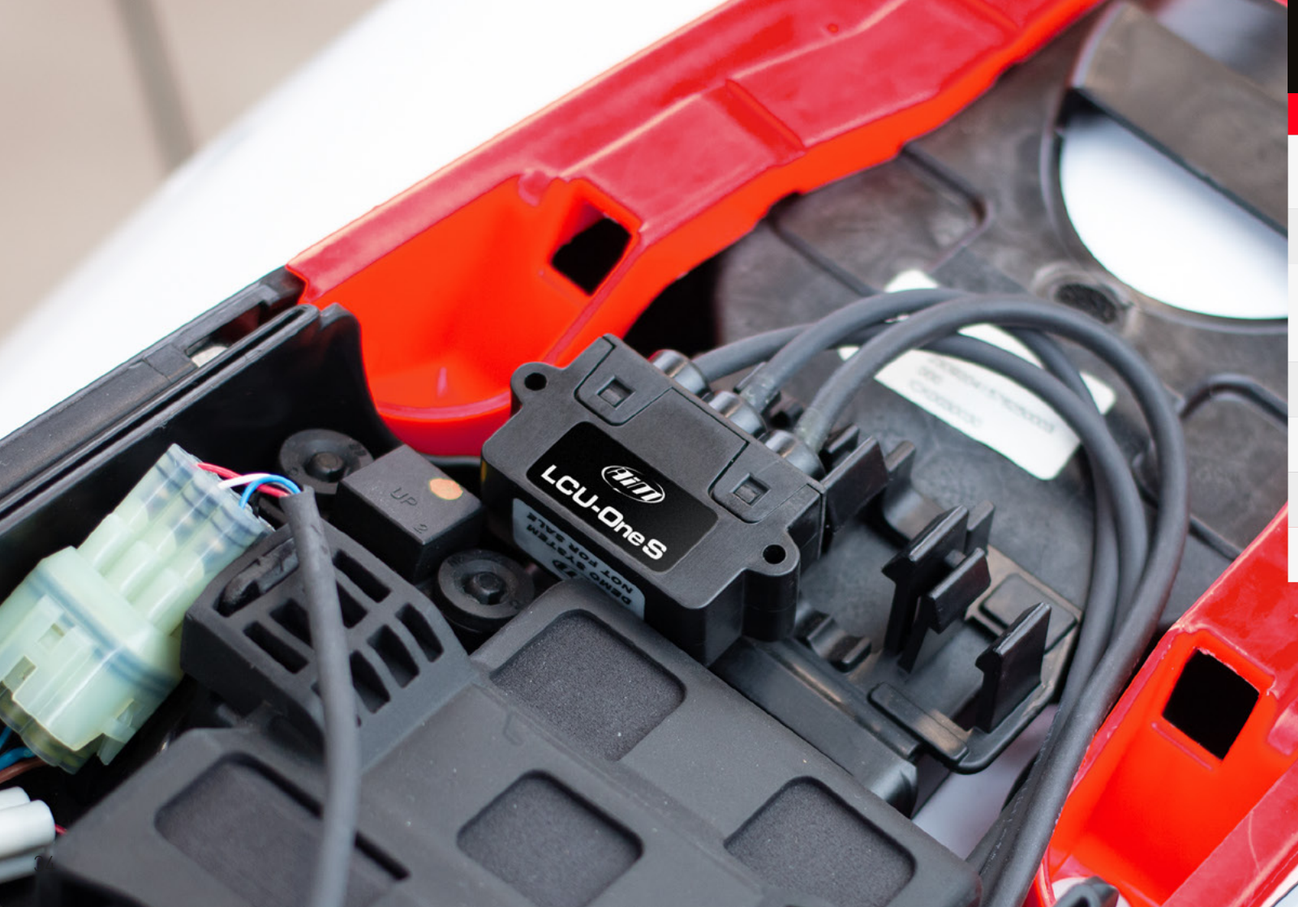
Precision and reliability

LCU-One S can detect accurate Lambda value from 0.65 to 1.6, offering you an extremely precise measurement, very useful for engine tuning.
Through the analysis of the remaining oxygen, **LCU-One S** points out a possible oxygen excess/lack in the carburetion and provides essential information for 2 strokes and 4 strokes engines.
The configuration of Stoichiometric ratio allows **LCU-One S** to be used on petrol, diesel and also alternative fuel powered engines.



Open version

LCU-One S is also available in "Open Version" for transmitting the data via CAN to every system: configuring the output is very flexible, by setting IDs, messages, baud rate and frequency.
Of course, the "Open Version" can also be used as an AiM Expansion, without any issues or limitations.



Technical specifications

	LCU-One S	LCU-One S Open
Sensor compatibility	Bosch LSU 4.9	
Power supply voltage	9÷15 V	
Power supply current	50 mA + sensor heater current typical 750 mA up to 2 A on cold sensor	
Materials	Latigloss 57	
Dimensions	43.4 x 30 x 18.4 mm	
Weight	70 g	
Waterproof	IP67	

K8

The CAN-Bus keypad by AiM

K8 is a compact keypad based on CAN bus protocol.
It comes equipped with eight buttons with interchangeable inserts.
The keypad is water and dust resistant, and can be installed both inside and outside the cockpit.

COMPACT,
FULLY CUSTOMIZABLE,
WATER AND DUST PROOF.

- Off
- Red
- Green
- Amber
- Blue
- Magenta
- Cyan
- White

Customized experience

Each pushbutton can be configured in multi-status, momentary or toggle mode; this last two may also be time dependent.
Every pushbutton has an associated RGB LED, enlightened for night time use or even as feedback after having required an action: you may choose the colour depending on a single status and the logic for turning it ON.

In addition the RGB LEDs lights may be configured to be continuos, slow or fast blinking.
You can also configure every single LED to be turned ON in different colours following the conditions defined through the math channels.
All these features make **K8** a customizable device in every aspect.

Open version

K8 is also available in “Open Version” for transmitting the data via CAN to every system: configuring the output is very flexible, by setting IDs,messages, baud rate and frequency.
Of course, the “Open Version” can also be used as an AiM Expansion, without any issues or limitations.

Technical specifications

	K8	K8 Open
Pushbuttons	8 programmable keys (momentary, toggle, multistatus)	
Backlight	RGB with dimming option	
Connection	AiM CAN 5 pins Binder 712	USB CAN 7 pins Binder 712
Materials	Rubber silicon and PA6 GS30% reinforced	
Dimensions	127.4 x 71.4 x 24 mm	
Weight	150g	
Waterproof	IP67	

OPEN

AiM technology,
available for everyone.

The **OPEN systems** are **AiM** proposal for having free configurable devices that can be connected, via CAN, to every dash, logger and external device.

GpS09c OPEN

ACC 2 OPEN

LCU-One S
OPEN

K8 OPEN

Configuration

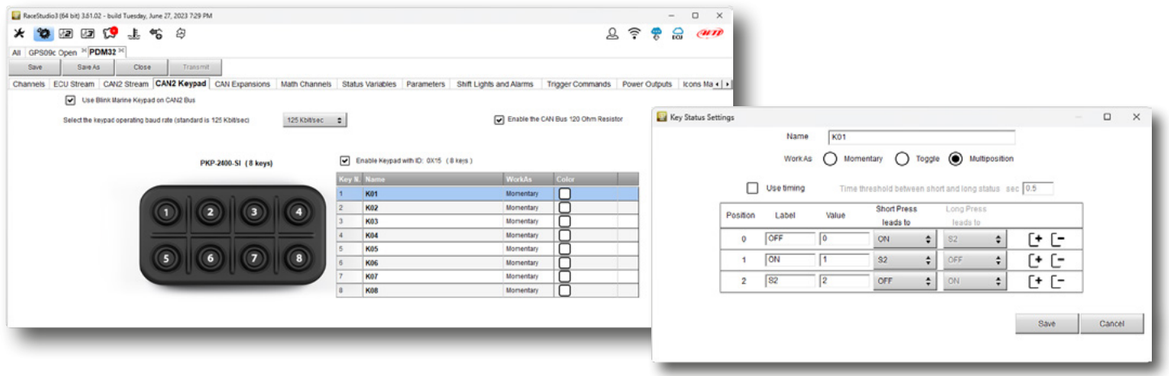
Every **OPEN** device features a 7 pins connector to be connected to a PC via a dedicated USB cable.

OPEN 7 pins connector

Dedicated USB cable

Race Studio 3 software

With **AiM** freely downloadable **Race Studio 3** software devices and the CAN messages can be easily configured.



All **OPEN** devices are available both for:

AIM CONNECTION
OPEN MODE CONNECTION

Remove the USB cable and use the CAN cable for connecting the device to a CAN network.

TAIPAN Y V2

The new plug&play dedicated ECU for 2023 Yamaha YZ450F MX bike

TAIPAN K

The new plug&play dedicated ECU for 2024 TWO-STROKES Bikes: KTM SX 125/250/300 2024 Husqvarna TC125/250 2024

AiM ECUs key features:

- **Fully plug & play**
- **More power at the wheel**
- **Up to five selectable maps**
- **Launch control**
- **Advanced strategies**
- **Advanced base maps**
- **Extra analog inputs**
- **Extra digital outputs**

High technology 32-bit core

This is the key to guarantee the efficiency and performance of the vehicle through: consistent engine rotation, increased power at the wheel, the possibility to repeat dozens of tests at the bench and perfect reactivity to map adjustments.

Spark live dash

Thanks to the new **CAN-WI-FI MODULE** it is possible to connect your ECUs (all models are compatible) to the **Spark live dash**, the app that allows you to change maps and other parameters, providing a clear dashboard with key data plus warnings and alarms for instant and complete engine control.
Available for Apple iPhone®, soon ready for Android® smartphones.

Alarms and setting pop-ups

HBS 2 - Handlebar Switch (second generation)

This switch is a worthwhile upgrade for riders who like tinkering and fine-tuning the engine performance.
Easy access to all 5 included maps, plus more.
For riders with modified engines - the on-the-fly fuel trim functionality allow to richen or lean out where and when needed.
With the new **HBS 2 AiM** optimized the pushbuttons for a quick and easy setup. This updated version features two extra pushbuttons and a more ergonomic shape.

Unlock the power

Base map makes the bike immediately more performing than the original map of the OEM control unit, but with **UC-Bridge** every rider has much more control on every aspect and tailor the engine power exactly to his needs, managing the following:

- **Advanced Strategies**
  Strategies can be configured for second injectors, quick shift, launch control, traction control and all the important parameters for the rider.
- **Extra Analog Inputs**
  2 analog inputs to manage external sensors to improve the bike performance,such as barometric air pressure.
- **Extra Digital Outputs**
  2 additional outputs, one dedicated to a second injector and another free to add another additional device, like, for example, a water pump.

Characteristics additional to the stock ECU

	TAIPAN Y V2	TAIPAN K
Additional Inputs	Two 0-5V analog inputs sampled @ 1,000 Hz each, could be alternatively used as switch to ground	Two 0-5V analog inputs sampled @ 1,000 Hz each, could be alternatively used as switch to ground
Additional Outputs	Second injector driver for high impedance saturated injectors (12Ω) One low side driver (1A)	One low side driver (1A)
CAN Connectors	1 CAN bus for calibration purposes	1 CAN bus for calibration purposes
Power consumption	150 mA	150 mA
Connectors	1 JST 04T-JWPF-VSLE-S 1 JST 08R-JWPF-VSLE-D 1 39 pin male	1 JST 04T-JWPF-VSLE-S 1 JST 08R-JWPF-VSLE-D 1 64 pins male
Body	PA6 + 30% glass fiber	PA6 + 30% glass fiber + EPDM cover
Dimensions	64.5x59x29.5 mm	118.5x111.5x40.8 mm
Weight	150 g approx	310 g approx
Waterproof	IP67	IP67

aim-sportline.com

NOV.2023