HIGHLIGHTS 2025


Always on track.
AiM OFFICIAL STORE
SOLO2 DL
YOKOHAMA
ADVAN


GT32
aim-sportline.com
RS3
RACESTUDIO
ADVAN
YOKOHAMA
AiM

Index

AiM, Motorsport since 1994

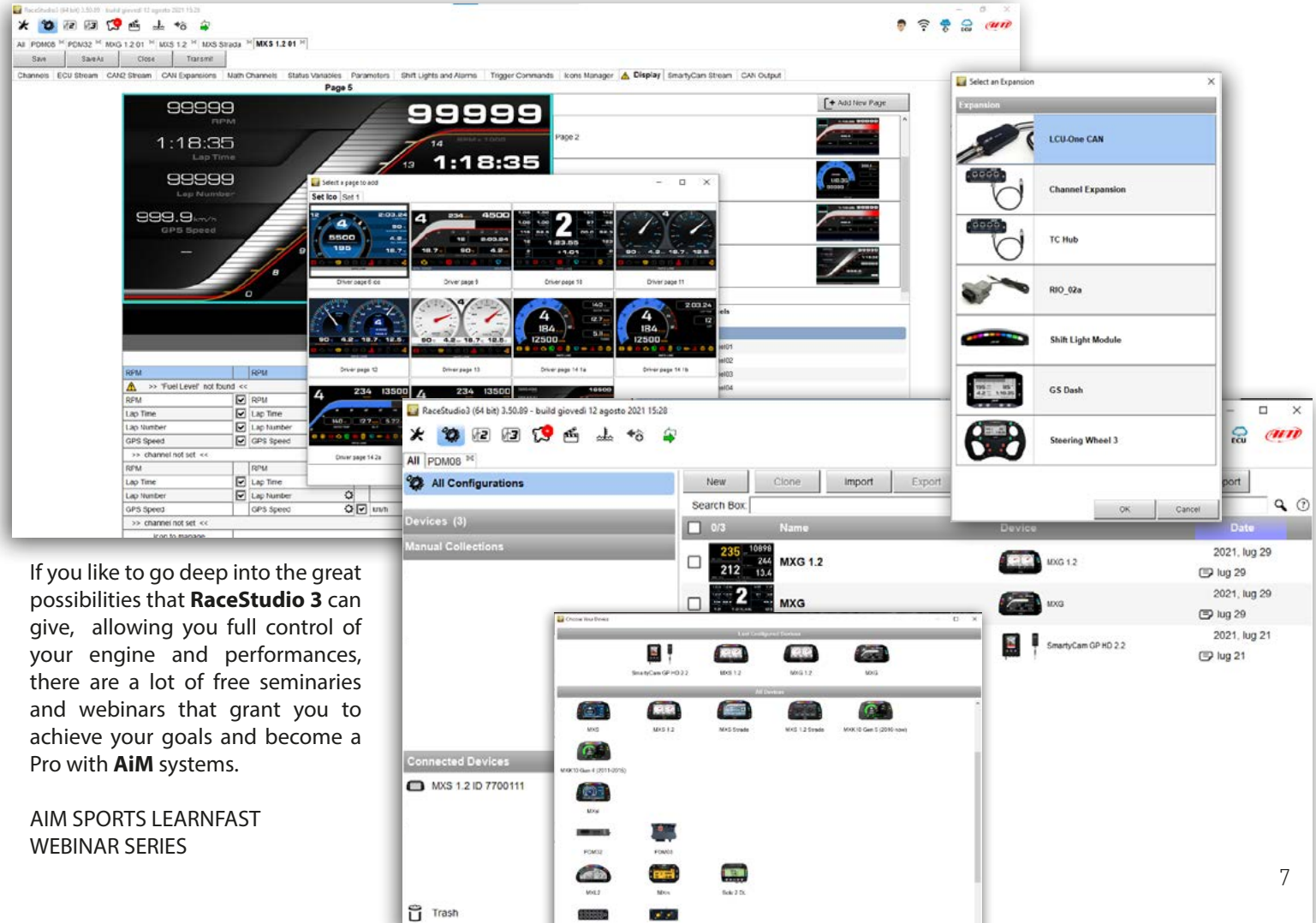
AiM's journey started with karts in 1994 and since then the company has expanded in any field of motorsport.
The mission is to create simple, effective and intuitive devices to improve vehicle, driver and team work performances thanks also to the technical support and dedicated softwares.
Loggers, GPS, 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 in-house development and production of:

- **HARDWARE**
- **FIRMWARE**
- **SOFTWARE**
- **MECHANICAL PARTS**

The powerful software

RaceStudio 3 is the "cockpit" of all our devices, as it will manage all your activities.
Thanks to this powerful software you can create, modify, delete, import and export configurations with all channels, ECU drivers, math channels, display pages, digital outputs, alarms, shift lights and all the expansions you need.
You will also be able to manage the maps of all your racing tracks and compare two laps watching the video recorded by SmartyCam 3 cameras.
You may choose among a wide range of styles and every field may show the channel you wish; you can setup each detail and manage what to show, with just some simple steps.



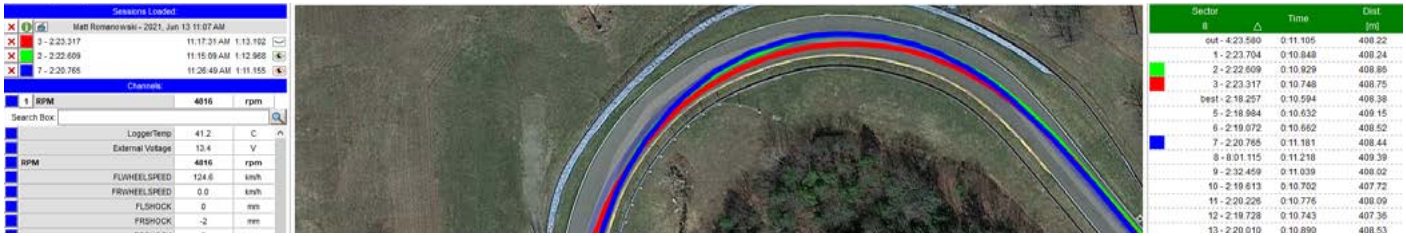
If you like to go deep into the great possibilities that **RaceStudio 3** can give, allowing you full control of your engine and performances, there are a lot of free seminaries and webinars that grant you to achieve your goals and become a Pro with **AiM** systems.

AIM SPORTS LEARNFAST
WEBINAR SERIES

Analysis 3

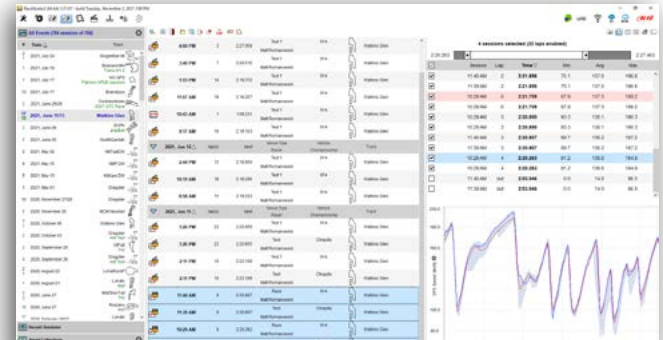
Your performances at your fingertips

Analysis 3 enables you to analyze all data recorded by **AiM** devices and downloaded to your PC: graphs, histograms and tables will help you studying your performance, providing an objective support to avoid mistakes and improve performances.



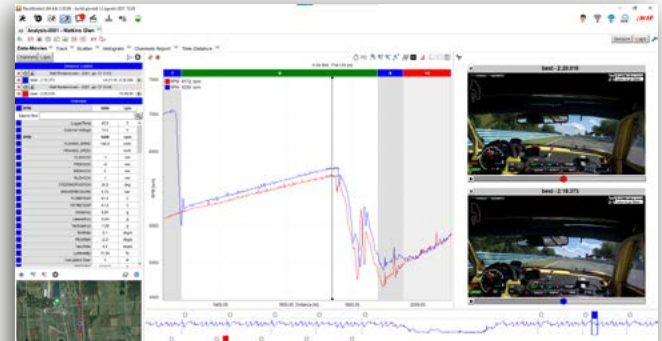
Preview and Comparison

An easy and quick outlook on your sessions before opening them. Select one session to get a preview, more sessions for a better comparison.



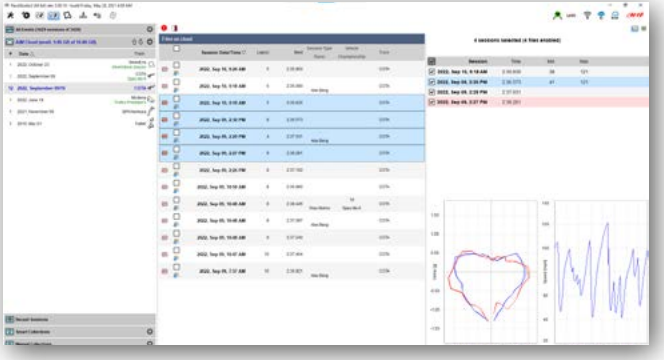
Smart Sync

Import your data and videos (from any AiM SmartyCam) and Analysis 3 automatically synchronize them.



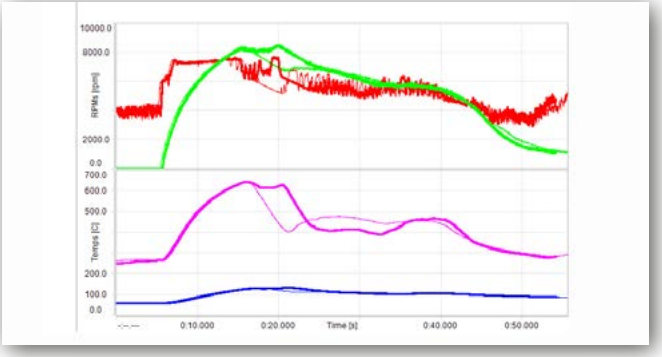
AiM CLOUD service

Now all your data and videos are available any time on all your PCs and you may share them with your friends, mates, coaches: just synchronize your AIM CLOUD and it is done! Easy and Safe. No more import/export and old pen drives.



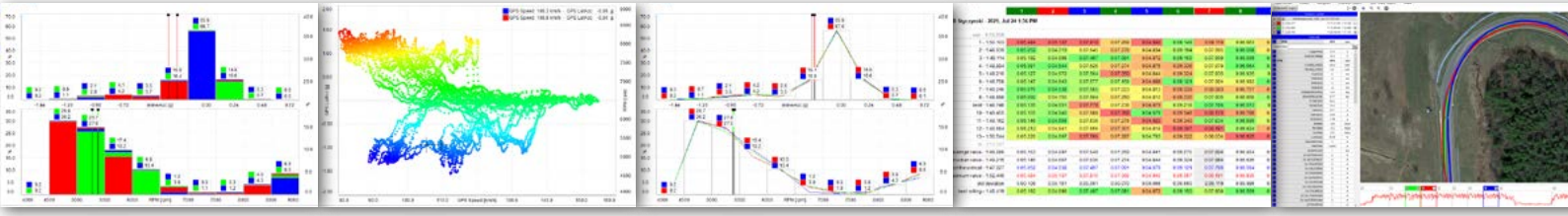
Dedicated views for Track races, Dragster, Oval

Analyze your test using the more efficient set of views and information you need to find out how to improve your performance.



Lots of views

A very wide range of plot/charting possibilities may help you in a deep evaluation of your vehicle or your driving style.

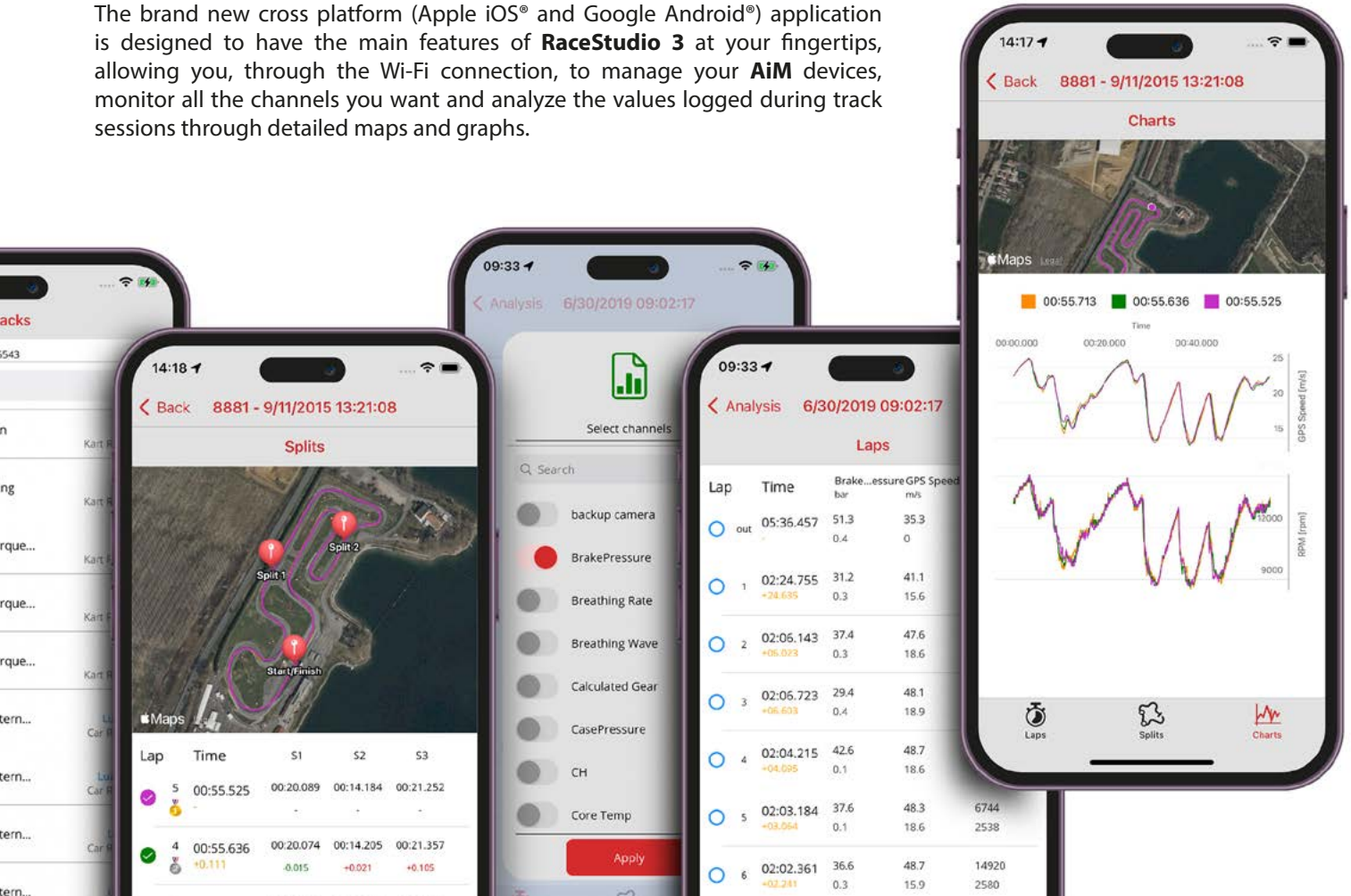


RaceStudio 3 always with you

Now **RaceStudio 3** is also available on your smartphone for managing the following features:

- **Data Analysis**
- **Online Data visualization**
- **Sensors calibration**
- **Tracks management**
- **Firmware update**
- **Data download and Cloud storage**

The brand new cross platform (Apple iOS® and Google Android®) application is designed to have the main features of **RaceStudio 3** at your fingertips, allowing you, through the Wi-Fi connection, to manage your **AiM** devices, monitor all the channels you want and analyze the values logged during track sessions through detailed maps and graphs.



Thirty years of MyChron

MY-CHRON
1994

MY-CHRON 2
1997

MYCHRON3
2002

MY 30th anniversary

MYCHRON4
2006

MYCHRON5
2015

MYCHRON6
2024

MYCHRON6

We are proud to introduce the new **MyChron6.**
Here the improvements in comparison to the previous MyChron5:

- Wider display with 16 levels of gray
- Second CAN, user configurable
- USB-C connector for mass storage, battery charger or PC communication
- Wi-Fi or USB connection to the PC
- 6 axis IMU also for measuring the steering wheel position
- 20 hours non-stop working battery

In the back of your **MyChron6,** the access to the USB slot is fast and safe.

Also your heart rate can be recorded among your data, **MC6** is compatible with all the heart rate monitors on the market.


24
LAP
2.53:36
12500
RPM
570°c
EGT
50°c
WAT
MYCHRON6

	MYCHRON6	MYCHRON6 2T
Display	LCD 16-level gray scale	
Resolution	320x136 pixels	
Backlight	8 configurable RGB colors	
Shift lights/alarm LEDs	5 + 2 configurable RGB LEDs	
Integrated track database	Yes	
Wi-Fi & Bluetooth connection	Yes	
GPS	25 Hz	
External power	9÷15 V	
Aux CAN connection	Yes	
USB connection	For data download, mass storage support and battery charge	
Temperature inputs	1	2
Inertial Platform	6 axis, 100 Hz frequency	
Digital inputs	Optical lap signal - Magnetic lap signal	
Digital outputs	1, programmable high/low activation	
External modules	MyChron Expansion - IR Temperature Controller - SmartyCam 3 Series - Lambda (LCU-One and LCU1S)	
Memory	4 GB	
Internal battery type	Rechargeable Lithium	
Body	PA6 GS30%	
Dimensions	150.0 x 79.0 x 36.6 mm	
Weight	370 g	
Waterproof	IP67	

MXT 1.3
MXT1.3 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.
The MX range has been developed with the same core, connectors and features but available in different sizes: 5" for **MXS** line, 6" for **MXP**, 7" for **MXG** and 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 **RaceStudio 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 **RaceStudio 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

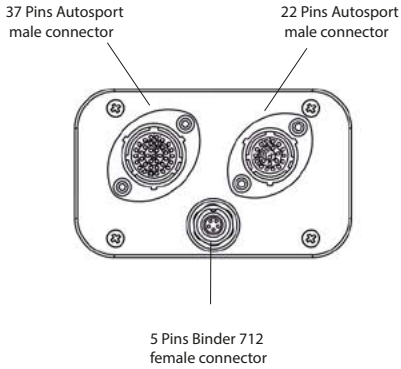
1234 Math channels

Second CAN

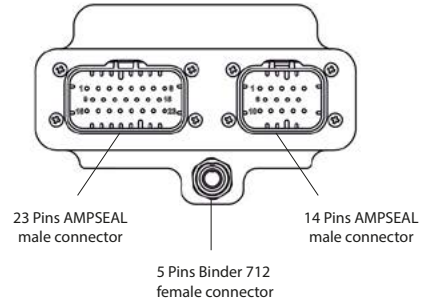
Digital Outputs

Connections

MXT 1.3



MXT 1.3 Strada



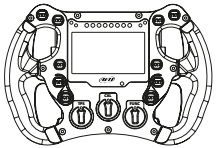
	MXT 1.3	MXT 1.3 Strada
Display resolution	1280x480	
Ambient light sensor	✓	
Alarm display icons	Freely configurable	
Shift lights	10 RGB LEDs	
Alarms	6 RGB LEDs	
CAN connections	3	
ECU connections	CAN, RS232 or K-Line	
Inertial platform	100 Hz 6 axis	-
Analog/Digital Inputs	8 configurable, digital-analog (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	
RaceStudio 3 (Configuration & Analysis software)	Constantly updated and freely downloadable	

SW4

The Steering Wheel with integrated datalogger

SW4 is one of the most versatile steering wheels on 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 - 280

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.

SW4


M
F
SF
PTP
PIT
N
RAIN
START STOP
OIL
LC
TPS
CAL
FUNC
14500 RPM
9.99 DELTA
999.99 FUEL L
N
01:35:35 LAP TIME
999.99 ECT BAR
99 LAP
999.99 ECU SPA
225 LABEL KM/H
9.99 FUEL L
9.99 FUEL L
driver name
23.02.2020 11:35 AM
GPS: GOOD
CIRCUITO INTERNAZIONALE DEL MUGELLO
AiM

	SW4
Diameter	Ø 270 - Ø 280 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, SmartyCam 3 series, ACC2, LCU1S, Channel Expansion, TC Hub, GS-Dash
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

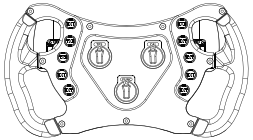
GT32

The Electronic Steering Wheel

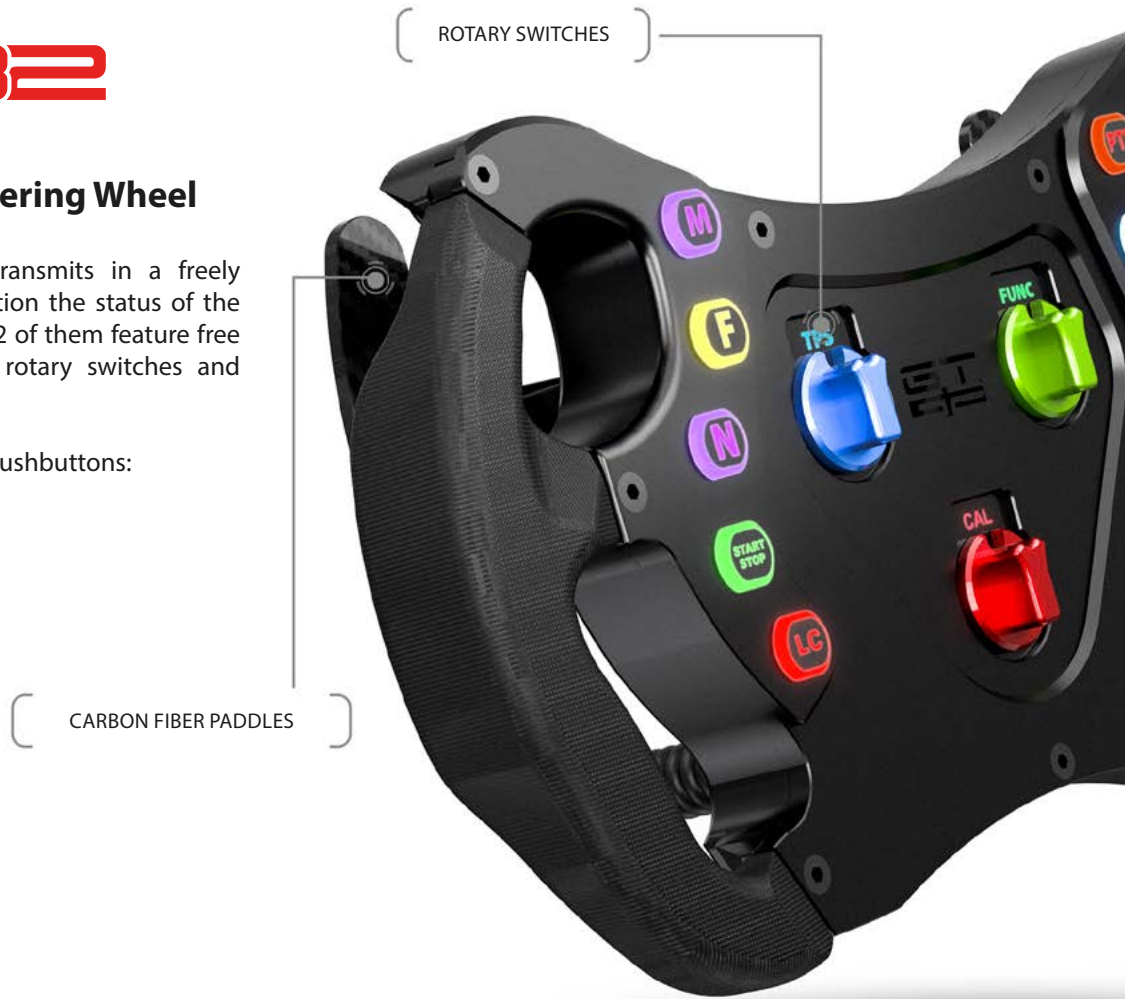
GT32 steering wheel transmits in a freely configurable CAN connection the status of the eight pushbuttons (while 2 of them feature free contacts connections), 3 rotary switches and paddles.

Completely configurable pushbuttons:

- Momentary
- Toggle
- Multistatus



Ø 320



CONFIGURABLE LEDs
PUSH BUTTONS

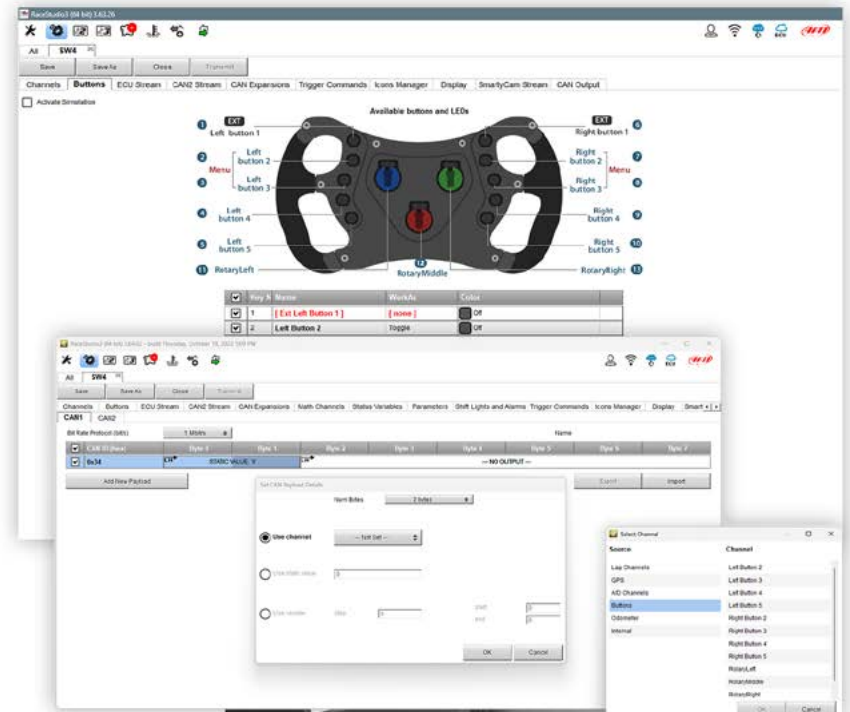
Custom backlighting

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 2 frequencies 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 through **RaceStudio 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.



AUTOSPORT 22 PINS
MALE CONNECTOR

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

XLog

The compact datalogger by AiM

XLog 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:
  - **ACC2**: Analog inputs
  - **LCU1S**: 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
- 4 GB internal memory
- Removable USB-C key
- Waterproof (IP67)

	XLOG
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	60 g
Waterproof	IP67

ECULog

The smallest datalogger by AiM

ECULog 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:

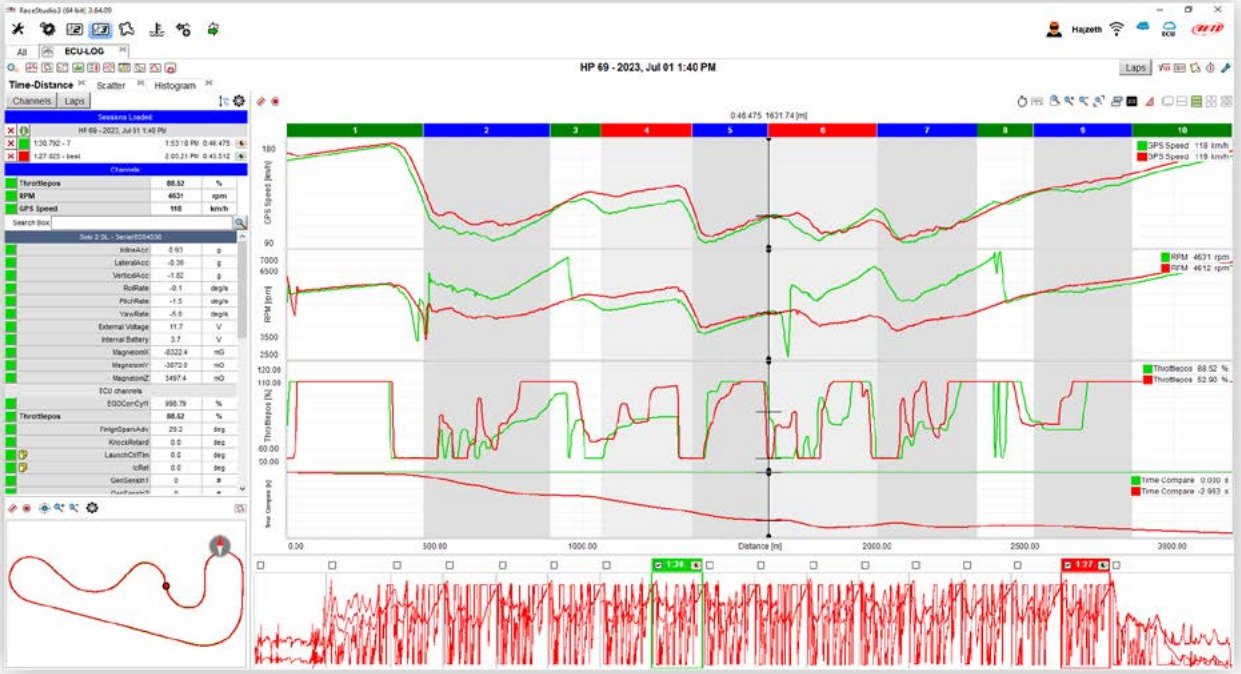
- ECU stream CAN: K-Line or RS232 connections
- Expansions:
  - **ACC2**: Analog inputs
  - **LCU1S**: Lambda controller
  - **SmartyCam 3 series**: Motorsport cameras

Then, it features:

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

Compact, powerful, reliable

The reduced size of the **ECULog** 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 **RaceStudio 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

Thanks to **RaceStudio 3** software will be fast and easy to create a complete system with the new **ECULog** designed by **AiM.**
A lot of adds-on are available to cover most requirements.

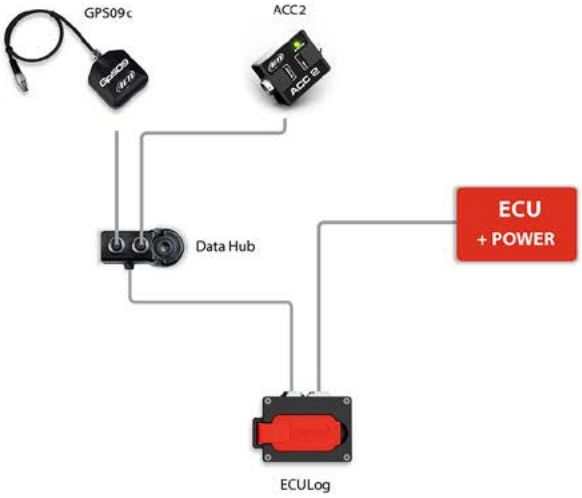
GPS09c
The coveted GPS by **AiM**

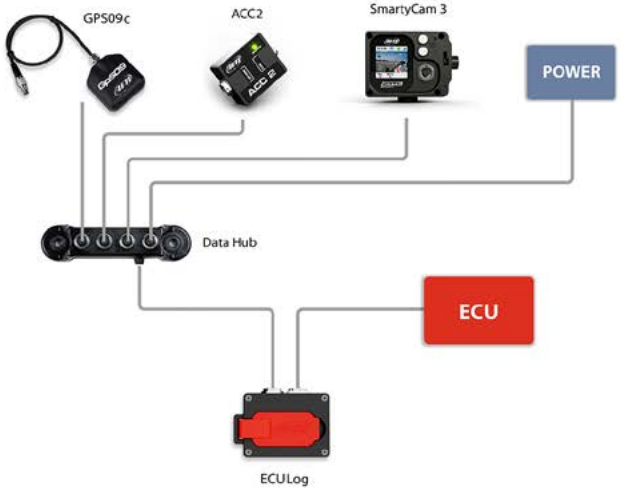
SmartyCam 3 series
Cameras with realtime data overlayed on videos

ACC2
Compact CAN converter

LCU1S
Reliable Lambda Controller

Connection examples





	ECULOG
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-C
Memory	4 GB internal + removable USB-C key
Material	PA6 + 30% glass fiber reinforced
Dimensions	61.4 x 44.7 x 27.2 mm
Weight	60 g
Waterproof	IP67

CANKey

The small CAN logger

Easy to install, it records your data through CAN connection and save them into a small USB-C memory module.

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

Compact and built to resist

The reduced size of the **CANKey** makes it ideal for any cockpit or vehicle.
Its rugged aluminum body with fast open system are designed to protect your data and to withstand in the extreme enviroment of the Motorsports.


R
M
SF
81.0
N
RADICAL
PIT
TPS
CAL

	CANKEY
ECU connection	1
External power	9÷15 V
Connectors	5 pins Binder 712 USB-C
Memory	4 GB internal + removable USB-C memory module
Material	Anodized Aluminum
Dimensions	55.90 x 22.70 x R 13.5 mm
Weight	50 g
Waterproof	IP67

SMARTY CAM3


SDI OUT
PWR / CHG
NET
REC
BULLET CAM 2
BULLET CAM 1
SMARTY CAM3 DUAL

The cameras designed for motorsport, with real time data overlays and data recording


12:33 04/10/2021
0.4
1.3
RPM
12832
2
85
KM/H
23 LAP
00:29:43 LAP TIME
01:42:06 BEST TIME
12.34 LT
FUEL LEVEL
92 °C
OIL TEMP.

SMARTY CAM 3

Real-time configurable overlays on video

SmartyCam 3 cameras have been designed for Motorsport with a single purpose:

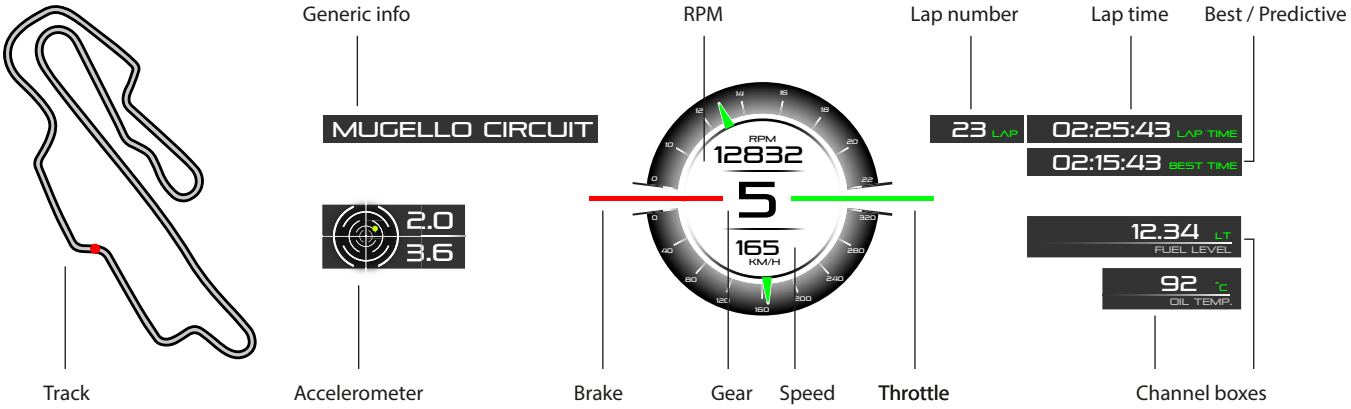
PROVIDING HIGH-QUALITY VIDEOS INCLUDING ALL THE DATA FOR PERFORMANCE ENHANCEMENT.

Configurable overlays

Choose which information to overlay with different styles and graphics elements. Not enought?
In addition, you can freely move every element in the screen, no condition at all, it's all up to you.

Access to all the data from different sources

- **From GPS**: track map and vehicle position, as well as speed, lap and split times.
- **From AiM loggers connected to your ECU**: RPM, throttle, engaged gear, acceleration, pressures, temperatures and additional sensors.



SMARTY CAM 3

Automatic Start & Stop

No need to think about the camera while you are ready at the starting line.
SmartyCam 3 cameras switch on/off and starts recording when the master does or based on RPM or speed condition previously set.

Designed for the extreme

SmartyCam 3 cameras are made in machinery molded aluminum, PA glass reinforced fiber, shapphire glass and are IP65 waterproof and, tested to face strong and prolonged vibrations, continuous rain, dust and extreme temperatures.

Smart Sync

In case MP4 data are not enough for your analysis, simply import video file and data from your **AiM Logger** and the software will automatically synchronize them: position on the track, video frame and data on the graph will be perfectly correlated.

ECU Connection

Feature a second CAN protocol that allows the user to set the ECU Stream of a wide number of supported ECUs.

No “Jello Effect” with Global Shutter CMOS

Engine rumble causes vibrations, which are a big problem for video recording. You will never experience again that bothersome “jello effect” you get watching videos recorded by a camera with rolling shutter when the vehicle is running. SmartyCam 3 cameras have been designed for that environment and for those vibrations.
“Jello effect” will be just a distant memory.

Video Output

SmartyCam 3 Dual ad GP features a video output with SDI interface.
It allows to send the video/audio stream to a streamer at 30 or 60 fps to perform a live streaming.

High quality with small size video files

Generic HD cameras are focused on the highest pixels number. The result is that their video files are far too large, taking too much memory. SmartyCam 3 videos have the same quality as other FHD cameras but their files are smaller because the H.264 compression system parameters have been optimized to perfectly balance video quality and file size.

Full internal datalogger

All data received are recorded in .mp4 files, your SD Card contains all the information you need for a deep data analysis. Whit the SD card you can also send the configuration, update and tracks to the camera.
(SD card sold separately)

SMARTY CAM 3 SPORT

- Global shutter CMOS sensor
- 1920x1080 Full HD 30 fps H.264
- Support for up to 2 TB Micro SD card
- Display resolution: 128x128 pixels
- 67° / 84° angle lens
- Internal, rechargeable lithium battery 350 mAh
- 9-15 Volt External Power
- -10°C/+50°C temperatures working range
- Auto Power ON/OFF
- Auto Start/Stop recording
- CAN connection to all AiM Systems

A motorsport camera in a pocket

Pick up your SmartyCam 3 and put it whatever you want: its compact design is perfectly shaped to take up as little space as possibile into your racing cockpit.

SMARTY CAM3 CORSA

- Global shutter CMOS sensor
- 1920x1080 Full HD 60 fps H.264
- Display resolution: 128x128 pixels
- 67° / 84° angle lens
- Internal, rechargeable lithium battery 350mAh
- 9-15 Volt External Power
- Support for up to 2 TB SD card
- -10°C/+50°C temperatures working range
- Auto Power ON/OFF
- Auto Start/Stop recording
- USB-C connection
- Internal and external Mic
- CAN ECU

The Benchmark of Motorsport Action Camera

SmartyCam 3 CORSA is the new version of SmartyCam HD, one of the most appreciated and well known racing product in the motorsport world.
All the great features that racers all around the world love about SmartyCam HD are way better in **SmartyCam 3**. The Global Shutter is now even **more performing**, the quality of video is Full HD and up to 60 fps, the exclusive overlayed data are more accurate than ever.
With the new **Smart Sync** feature **RS3 Analysis 3**, detects and aligns data from the file you've downloaded from any AiM device in just a click.

Simple, powerful, better than ever.

SMARTY CAM 3 GP

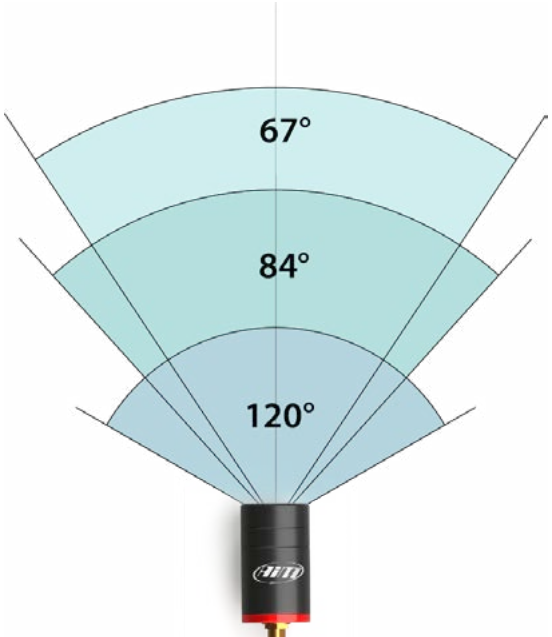
- Global shutter CMOS sensor
- 1920x1080 Full HD 60 fps H.264
- Display resolution: 240x320 pixels
- 67° / 84° / 120° angle lens
- Internal, rechargeable lithium battery 1,250 mAh
- 9-15 Volt External Power
- Support for up to 2 TB SD card
- 2 Binder 712 female connectors + 2 SMA + 1 USB-C
- -10°C/+50°C temperatures working range
- Auto Power ON/OFF
- Auto Start/Stop recording
- 1 Video Output

Camera with Bullet Lens

SmartyCam 3 GP is designed to be installed in open roof vehicles, where it is important that the CMOS is enclosed in a small, waterproof body, to resist the most extreme and severe condition of racing.
The bullet comes with 67°-84°-120° angle lens.
The 67° FOV lens is usually adopted in closed roof cars, thus avoiding an excessive view of the cockpit in the video, while the 84° and 120° lenses are used in open-wheel cars and prototype offering a wide open view of the track.

HQ videos from another perspective

SmartyCam 3 GP is for who needs external video and has very little space for installation. The AiM Bullet Cam features an internal battery of 1,250 mAh.
SmartyCam 3 GP is designed to be installed out of the vehicle, it is perfectly confortable from – 10° to + 50° Celsius and the bullet is rated IP65 waterproof, to resist the most extreme and severe condition of racing.
Featuring 2 Binder 712 female connectors plus 2 SMA female connectors, the SmartyCam 3 GP has now a 3G-SDI Output for stream.



SMARTY CAM 3 DUAL

- Global shutter CMOS sensor
- 1920x1080 Full HD 60 fps H.264
- Display resolution: 240x320 pixels
- 67° / 84° /120° angle lens
- Internal, rechargeable lithium battery 4800mAh
- 9-15 Volt External Power
- Support for up to 2 TB SD card
- -10°C/+50°C temperatures working range
- Auto Power ON/OFF
- Auto Start/Stop recording
- 1 Video Output
- 2 Video Inputs
- Autosport connector
- Ethernet 1 Gigabit
- USB-C
- CAN ECU connection
- Expansion CAN connection

If One is great, Dual is Better

SC3 DUAL is the flagship version of SmartyCam 3 range, designed for any racer who wants to get the most out of his performance video on the track.
SmartyCam 3 DUAL features two 60 fps video inputs, 3G-SDI video output for streaming, USB-C and Ethernet data transfer, ECU connection.
Those are only few of the features of this exclusive version of **SmartyCam 3**. **The most powerful of our range.**


31.3 Gb
Rec
Menu

	SPORT	CORSA	GP	DUAL
Video format	H.264 1920 x1080 px @ 30 fps		H.264 1920 x1080 px @ 60 fps	
Display Resolution	128 x128 pixels		240 x 320 pixels	
Field of view	67° / 84°		67° / 84° / 120°	
Internal battery	Rechargeable lithium battery			
External power	9-15 Volt			
Supported SD card	Up to 2 TB (Micro SD)	Up to 2 TB (SD)		
Internal SSD memory	-		Up to 64 GB (optional)	
Accelerometer	Three-axial ± 16G			
Connectors	1 Binder 712 female	3 Binder 712 female 1 USB-C	2 Binder 712 female conn. 2 SMA female conn. 1 USB-C	1 Autosport connector 2 SMA bullet connection 1 SMA 3G-SDI Video out USB-C
Temp. working range	-10°C/+50°C			
Auto Power ON	Yes			
Auto Power OFF	Yes			
Auto Start/Stop Recording	Yes			
Video Out	-		3G-SDI	
Bullet cable length	-		2.0 m	
Body	PA6 + 30% Glass reinforced Anodized Aluminum	Anodized Aluminum		
Dimensions	79.9 x 54 x 46.5 mm	102.2 x 63 x 46.5 mm	Main unit 120.8 x 80.2 x 30.9 mm Bullet camera 24 diam x 48.2 mm	Main unit 154.4 x 109.6 x 42 mm Bullet camera 24 diam x 48.2 mm
Weight	200 g, battery included	280 g, battery included	Main unit 320 g Bullet 45 g	Main unit 800 g Bullet 45 g
Waterproof	IP65			

PDM32
PDM08

- Integrated Power Distribution Module
  + 4 gigabytes datalogger
  + Dash controller
- 5", 6" or 10" Display
- GPS09 Module for automatic Lap Time and track position
- 3 CAN connectors

PDM32

- 28 High Side Outputs
- 4 half Bridge Outputs

PDM08

- 8 High Side Outputs

Much more than a Power Distribution Module

PDM32 and **PDM08** Power Distribution Modules are designed to distribute power to multiple circuits on your vehicle, easily replacing traditional fuse and relay system.

Our PDMs are housed in anodized billet aluminum case.
They are designed to handle the rigors of motorsport and include a complete professional data logger and internal dash controller.
Being the center of vehicle electronics, the harness and installation are simplified for offer more control.
5", 6" and 10" displays in are available for **AiM PDM**s, offering the perfect solution for a complete integrated system.

PDM08


+12V
Battery
PDM08
LED status
Power Battery
Remote link
Connector

PDM32


LED status
Power Battery
Remote link
Mirror camera
USB connection
Connectors

	PDM08	PDM32
LEDs	8 RGB LEDs + 1 PDM ON + 1 PDM STS (Status)	32 RGB LEDs + 1 PDM ON + 1PDM STS (Status)
Inputs	6 fully configurable, recorded at max 500 Hz each: analog (0-5V ; 0-12V)/digital inputs Pullup/Pulldown	14 fully configurable, recorded at max 500 Hz each: 8 analog (0-5V ; 0-12V)/digital inputs 4 digital inputs 2 Pullup/Pulldown
Power outputs	1 with serie diode rated up to 20 A 1 rated up to 25 A 6 rated up to 15 A Protected for: over voltage, under voltage, over current, over temperature All outputs have internal freewheeling diode Total max current: 100 A	4 rated up to 20 A (high side) 12 rated up to 15 A (high side) 12 rated up to 10 A (high side) 4 rated up to 35 A (high side/half bridge/low side/configurable PWM at max 500 Hz) Protected for: over voltage, under voltage, short circuit, over current, over temperature Total max current: 120 A
Lin bus	1	
CAN connection	3	
Internal memory	4 GB	
External modules	GT32, GPS09c, Channel Expansion, TC Hub, Lambda Controller, SmartyCam 3 Series, Memory Module, Keypad Series	
Ext. Analog Camera input	-	2
Connectors	1 AMP connector + 1 Amphenol Surlok connector + 1 Rosenberger connectorCAN	2 AMP connectors + 2 Binder connectors + 1 Amphenol Surlok connector + 1 Rosenberger connectorCAN
Remote display connection	1 AiM stream output	
Body	Anodized Aluminum	
Dimensions	161x100.6x50.6 mm	223.0 x 94.6 x 49.5 mm
Weight	370 g	760 g
Waterproof	IP65	

EPM32
EPM08

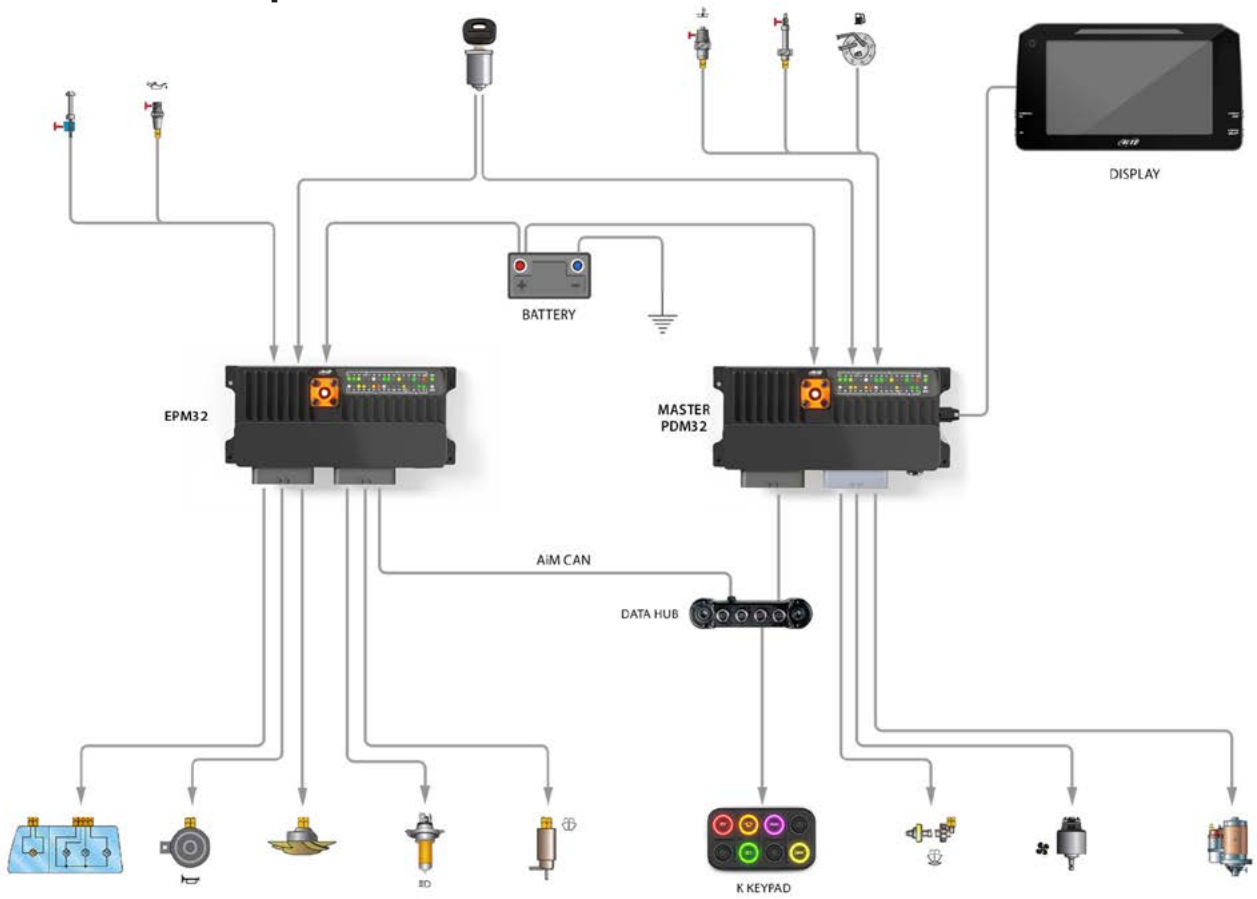
The EPM32/08 are two expansions dedicated to:

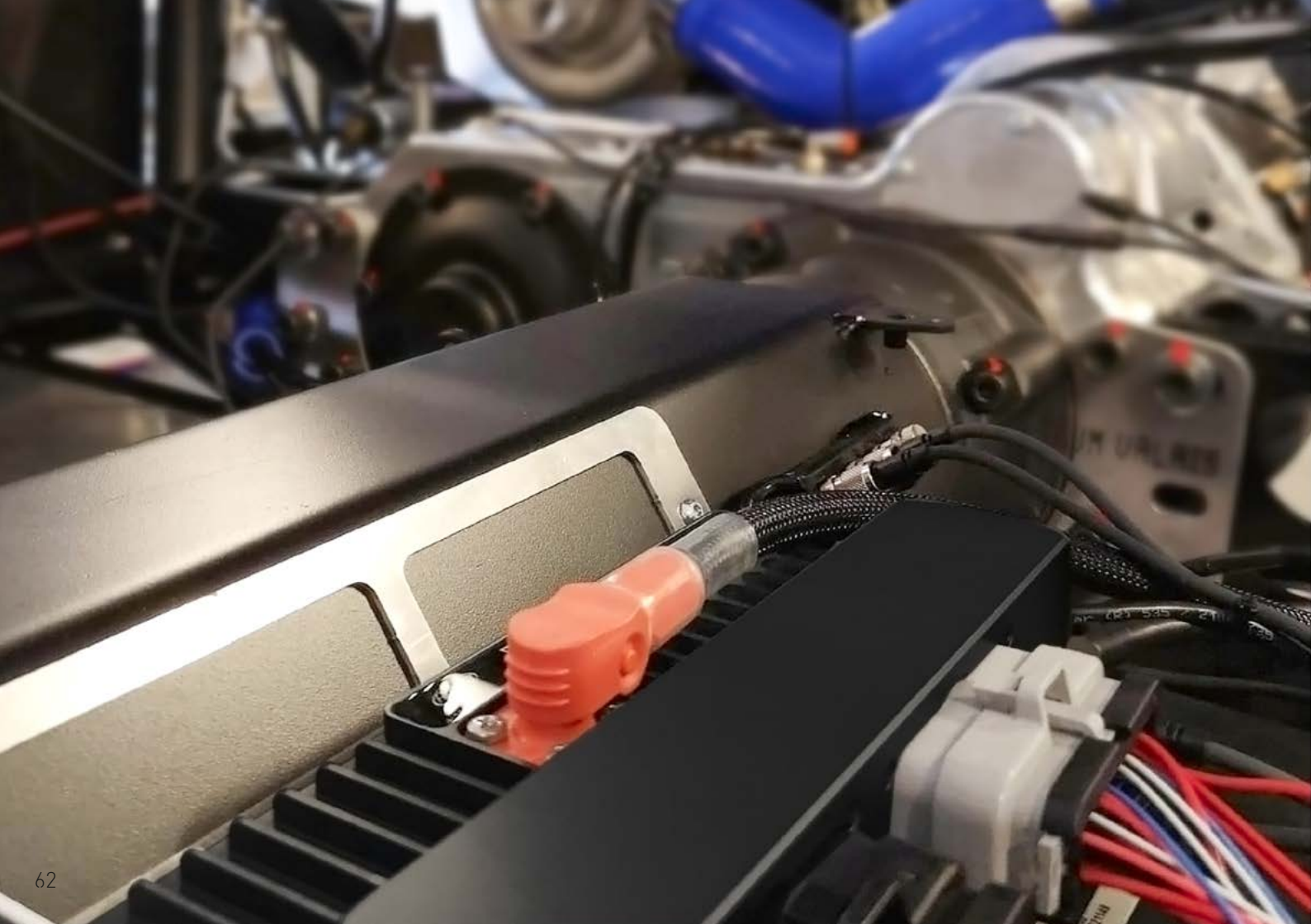
- **MXS 1.2-1.3**
- **MXP 1.2-1.3**
- **MXG 1.2-1.3**
- **MXT 1.3**
- **PDM08**
- **PDM32**

With **EPM32/08** your system will have completely configurable power outputs, digital and analog inputs.

- RGB LEDs
- Analog/digital inputs
- Power Outputs
- AMP and Amphenol Surlok connectors

Connection example





	EPM08	EPM32
LEDs	8 RGB LEDs + 1 EPM ON + 1 EPM STS (Status)	32 RGB LEDs + 1 EPM ON + 1EPM STS (Status)
Inputs	6 fully configurable analog inputs (0-5V ; 0-12V) recorded at max 500 Hz each digital inputs pullup/pulldown	12 inputs (8 configurable as analogic or digital, 4 digital only) Up to 8 analogic inputs recorded at maz 500 Hz each Up to 12 digital inputs pullup/pulldown
Power outputs	1 with serie diode rated up to 20 A 1 rated up to 25 A 6 rated up to 15 A Protected for: over voltage, under voltage, over current, over temperature All outputs have internal freewheeling diode Total max current: 100 A	4 rated up to 20 A (high side) 12 rated up to 15 A (high side) 12 rated up to 10 A (high side) 4 rated up to 35 A (high side/half bridge/low side/configurable PWM at max 500 Hz) Protected for: over voltage, under voltage, short circuit, over current, over temperature Total max current: 120 A
Connectors	1 AMP connector + 1 Amphenol Surlok connector	2 AMP connectors + 1 Amphenol Surlok connector
Body	Anodized Aluminum	
Dimensions	161x100.6x50.6 mm	234.4 x 95.1 x 49.0 mm
Weight	370 g	740 g

GpS09c

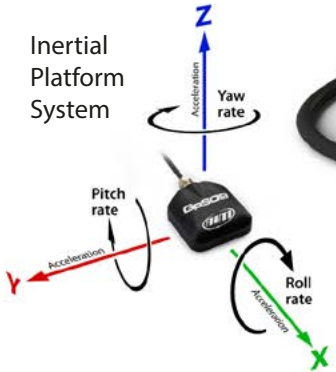
Roof version

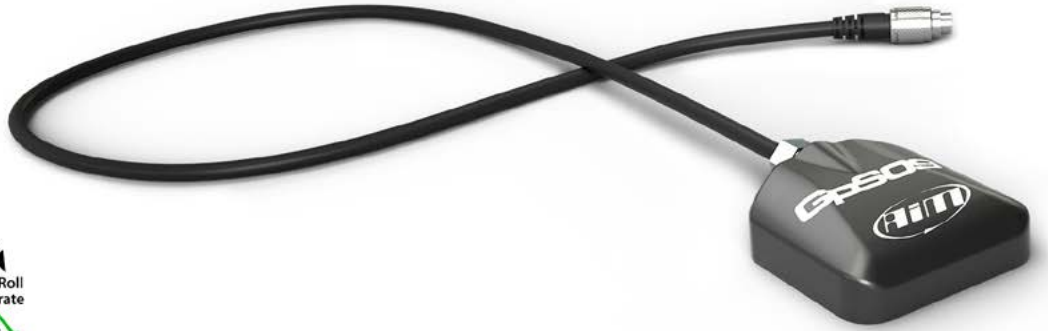
GPS09c has the following features:

- 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**

Inertial
Platform
System

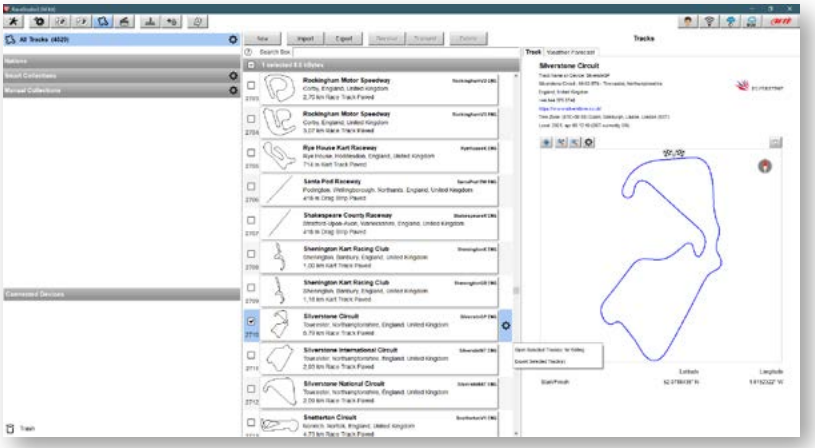




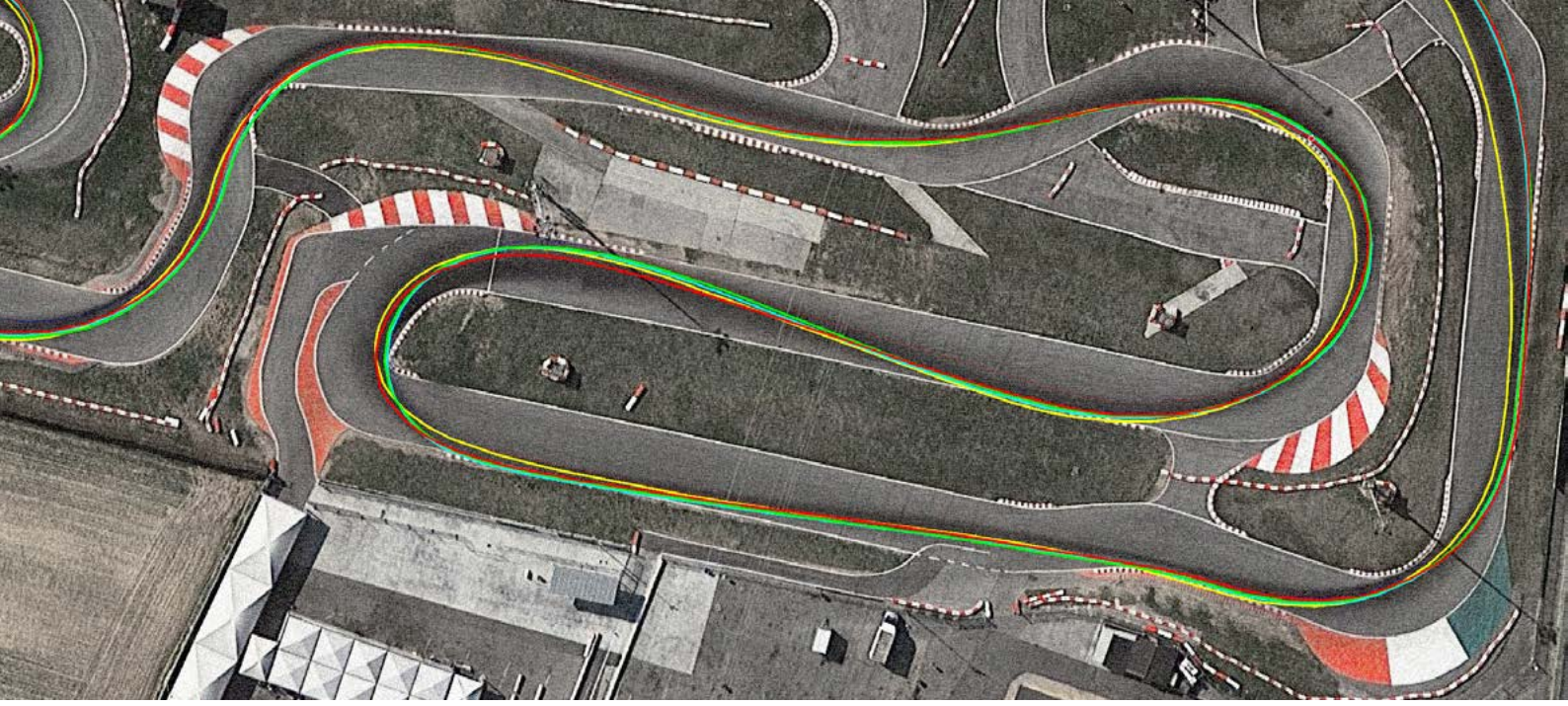
Standard version

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.

	GPS09c	GPS09c Pro	GPS09c Open	GPS09c Pro Open
GPS	25 Hz			
Constellation	4 (GPS, GLONASS, Galileo, BeiDou)			
Accuracy	0.5 m CEP			
Cold start	30 seconds TTFF			
Hot start	1 second			
Antenna	Internal, 22 mm			
External power	5÷15 V			
Connection	AiM CAN		CAN, RS232	
Inertial Platform	-	6 axis, 100 Hz	-	6 axis, 100 Hz
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 (100 g for Roof version)			

ACC2

ACC2 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 **ACC2** 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

4 analog channel split harness

ACC2

Analog CAN Converter

ECLIPSE

Linear potentiometers

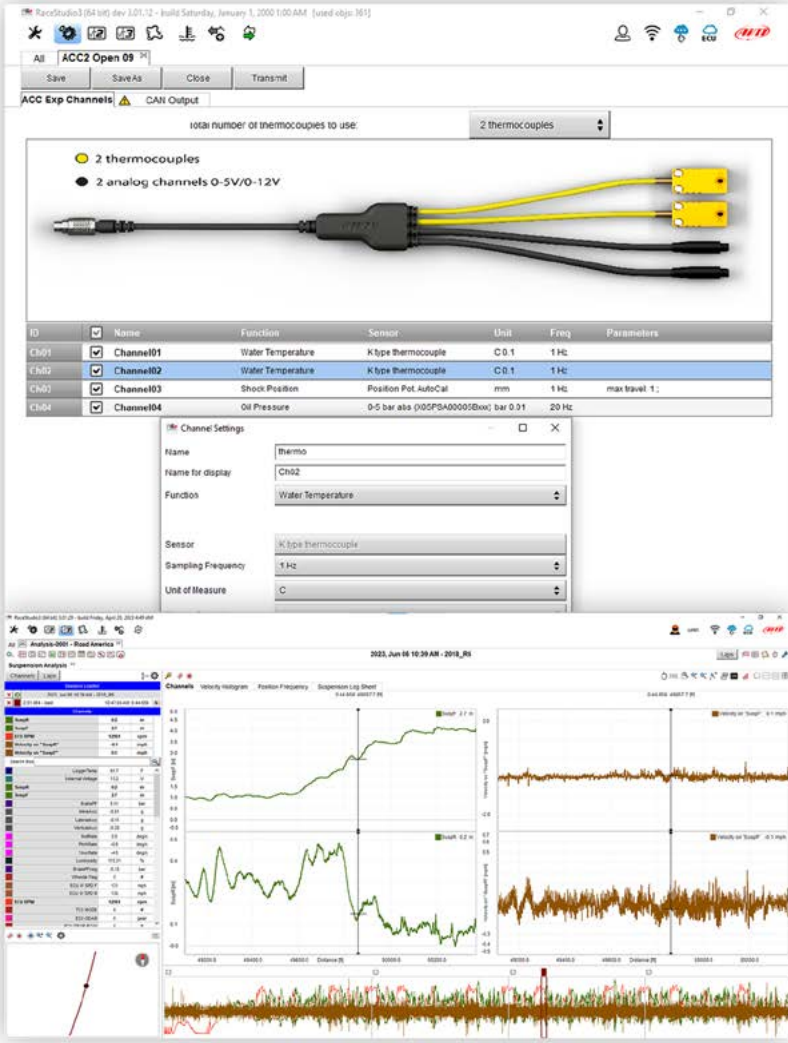
Temperature and pressure sensors

Open version

ACC2 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

ACC2 can be connected to **Eclipse sensors.**
All the acquired data **AiM** linear potentiometer can be managed through the new **Suspension Analysis Tool** in **RaceStudio 3**, for an even more complete performance analysis software.



	ACC2	ACC2 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	

LCU1S

Total control of your engine

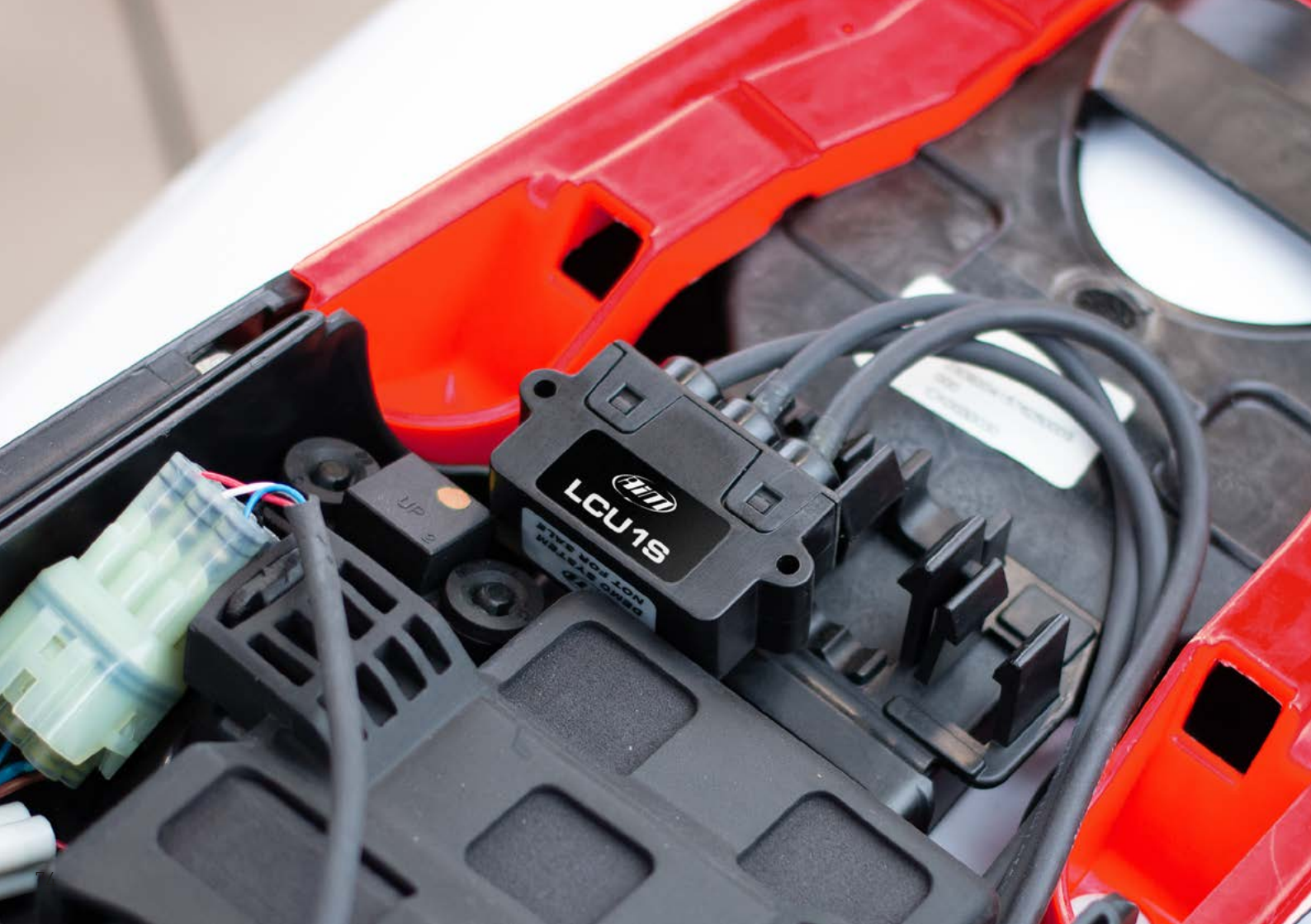
LCU1S controller allows to perfectly tune the carburetion of your engine to keeping it at its best and improve the engine's performances.
It uses a wide band Bosch LSU 4.9 sensor, used for its capacity of saving the original calibration for the duration of the sensor's life. In fact, Bosch LSU 4.9 probe has been designed to last for more than 100,000 km on a stock car.

Precision and reliability

LCU1S 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, **LCU1S** 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 **LCU1S** to be used on petrol, diesel and also alternative fuel powered engines.

Open version

LCU1S 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.


LCU1S

	LCU1S	LCU1S 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	

Keypad series

The CAN-Bus keypads

K6, **K8** and **K15** are the AiM compact keypads based on CAN protocol.
They are completely customizable and proposed with a wide range of interchangeable inserts.
Configurable via USB fast and easy.

These rugged keypads are 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; these 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 the **Keypad series** devices customizable in every aspect.


0.0
130
121.0
0
RPM
6016
6016
6020
6024
6020
0.2
04:26AM
PTP
MAIN
N
PCV
Map
Launch

Open version

Keypad series 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

	K KEYPADS	K OPEN KEYPADS
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	150 g	
Waterproof	IP67	

OPEN

AiM technology,
available for everyone.

GpS09c OPEN

ACC2 OPEN

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

LCU1S OPEN

Keypad series OPEN

Configuration

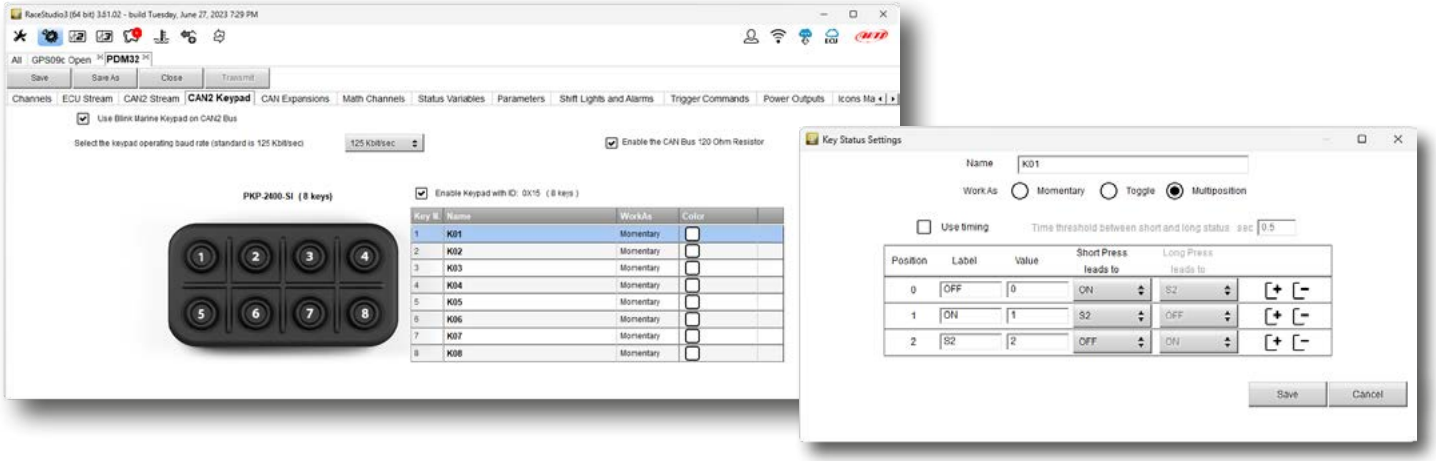
Every **OPEN** device features a 7 pins connector to be connected to a PC via a dedicated USB cable.

OPEN 7 pins connector

Dedicated USB cable

RaceStudio 3 software

With **AiM** freely downloadable **RaceStudio 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.

ECLIPSE

- Accuracy <+/- 0.5%
- Output signal 500mV/0 - 4500mV/ full range
- Temperature working range from -30°C to +100°C
- Repeatability ≤ 0.01 mm
- Operational speed ≤ 10 m/s
- Mechanical life >25 million cycles
- Waterproof IP65

Linear potentiometer series

Eclipse series, the new line of linear potentiometers, is born from the AiM experience acquired in the motorsport world to cover the needs of the racing industry.
Easy to install, our linear position sensors offer great performances in terms of accuracy, repeatability and life expectancy.
The continuous research to provide the best solutions for our demanding customers lead us to a new concept of sensors.

Advanced materials

Housing is in glass fiber, a material that features excellent resistance to mechanical stress and thermal changes, outstanding capacity as electric insulator, flame resistance and self-extinguishing, a perfect material for linear potentiometer purpose.
The shaft, normally made of steel, is now made in extruded carbon fiber. This combination guarantees lightness and resistance at one time.

Custom made range

Almost tailor made, ECLIPSE series is proposed in a wide travel range.
AiM Eclipse linear potentiometer end has M4x0.7 mm male thread on both ends.
Quick release balljoint or rod end bearing, free wires or AiM compatible connectors, all combination available for the best mounting on any vehicle.

Potentiometer travel	
50 mm	175 mm
75 mm	200 mm
100 mm	225 mm
125 mm	250 mm
150 mm	

Inductive & Contactless

Thanks to the Inductive Contactless Technology, **AiM Eclipse** series assures unmatched wear resistance; no contact means minimum wear and tear therefore no performance degradation during his life cycle.

Quick release balljoint

Rod end


ECLIPSE

	ECLIPSE SENSORS
Supply voltage	Vref 5 Vdc
Signal output	500mV/ 0 - 4500mV/ full range
Repeatability	≤ 0.01 mm
Operational speed	≤ 10 m/s
Mechanical life	>25 million cycles
Independent linearity	≤±0.5%
Temperature working range	-30°C to +100°C
Housing	Glass fiber
Shaft	Carbon fiber
Weight	20÷40 g
Cable type	Raychem 55M 26 AWG Viton Sleeve
Cable length	500 mm
Waterproof	IP65

PYTHON

Multi-Cylinder ECU

Experience the future of engine control with the new **Python** Multi-Cylinder ECU.

Its advanced technology enables unparalleled customization and flexibility, making it the perfect solution for both category-managed and unrestricted applications.
Port Injection ECU delivers full control for most modern engines.

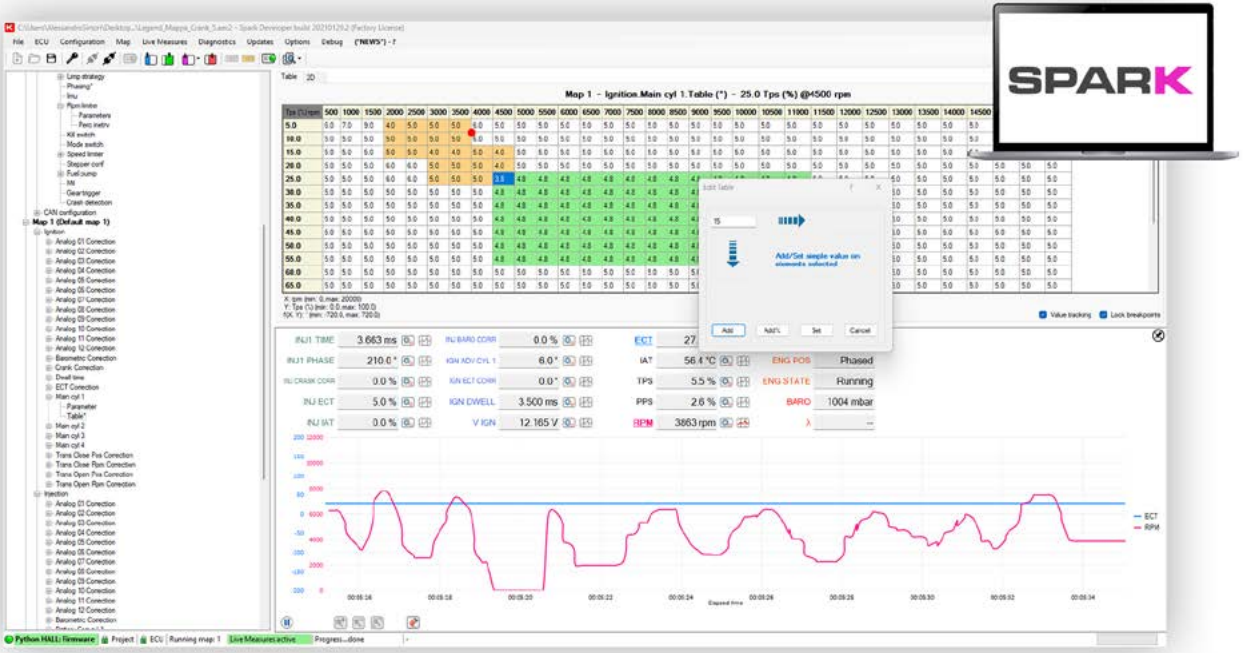
- Manages engines with up to 4 cylinders
- Drive up to 4 power coils directly
- Accelerate your tuning process with integrated wideband Lambda controller and barometric pressure sensor
- Unlock advanced tuning capabilities, including 9 analog inputs, 3 temperature inputs, 1differential crank position sensor or 1 HALL crank position sensor inputs.
- Drive by wire
- Aluminum body

Rugged and reliable

Every device is completely manufactured, assembled and tested in-house to ensure high reliability of the product and meet the highest standards.
Designed to face the harshest environments, the components used allow continued operation in a very wide temperature range.

Unique maps and strategies

With **Spark** cutting-edge **AiM** software, tuners can unleash the full potential of the engine by developing unique maps and control strategies, every parameter can be managed with precision and control.
Connect an **AiM** data logger or a dashboard via CAN bus to manage a complete system: the most important data will be immediately visibile and recorded for in-depth analysis.
Sophisticated **drive-by-wire** strategies provide a wide range of throttle control along with advanced plausibility (fault/error) checking for safety.



AiM Spark screen for ignition time adjustments. Editing table with live view data and graphs.

	PYTHON
Outputs	• 4 saturated injectors (12Ω) • 4 coil power driver (21A, 390V, 300 mJ) • MRD low side (main relay driver max 0.6A) • 1 high side 5A • 1 bipolar stepper motor driver 0.6A • 1 H-BRIDGE (DBW) 8.3A • 2 Vref (5V, 100 mA) • 7 low side (6 @ 4A, 1 @ 2.2A)
Inputs	• 1 differential crank position sensor (VRS) or 1 HALL crank position sensor • 3 digital frequency input (2 speed , 1 cam sync) VRS/HALL • 1 key input • 4 digital input, close to GND • 9 analog inputs (8 inputs 0-5V, 1 input 0-12V) • 3 temperature inputs 50 Ω-100K Ω
Interfaces	2 CAN busses (1 for calibration, 1 for datalogger/dashboard)
Connector	APTIV/DELPHI 64 contacts
Material	Anodized Aluminium
Dimensions	122.3x120x40.4 mm
Weight	450 g
Waterproof	IP67
Lambda	Internal wide band lambda controller
Sensor	Internal barometric sensor
Datalogger	Internal, for 30 min acquisition
Inertial Platform	Internal 6 DOF IMU (3 x accelerometers, 3x gyro) for pitch and roll

TAIPAN 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 TC 125/250 2024
GAS GAS MC 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 iOS® and Google 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.

Additional characteristics 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	310 g
Waterproof	IP67	IP67


Always one step ahead.

aim-sportline.com

NOV.2024