2022
RACING GUIDE




SMARTYCAM 3
AiM
AiM
4S
POWER

Index

Research, technology,
experience and passion.

The Company

AiM is today a key player in motorsport and race data acquisition technology.

AiM strength is its highly specialized technological background: 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

Sectors of activity

AiM designs laptimers, dashes, loggers, motorsport cameras, ECUs, PDMs for all kinds of racing vehicles: from kart to car, bikes, UTV, ATV, Jr. dragsters and even snowmobiles and F1 boats...

A Worldwide Distribution Network

More than 50 official distribution organizations all over the world attend our customers with aftermarket support.

A Technical Service on track

Our technicians give constant support on track in the US, South America, Europe, Australia, Asia

Technical Support and Seminaries

- Completely free of charge telephone support
- Tenth of seminars per year both in Europe and in US
- Free weekly webinars on all the most relevant subjects related to our products

Comparison chart

													
	Solo 2	Solo 2 DL	MXm	MXS1.2	MXsl	**MXP**	**MXG 1.2**	**MXS 1.2 Strada**	**MXP Strada**	**MXG 1.2 Strada**	**PDM32**	PDM08	SW4
TFT Display	-	-	-	5″	5″	6″	7″	5″	6″	7″	6″-10″	6″-10″	4,3″-5 ″
LCD Display	✓	✓	✓	-	-	-	-	-	-	-	-		
ECU Connection	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CAN Connection	-	2	2	3	3	3	3	3	3	3	3	3	3
Analog Digital Input	-	-	4	8	8	8	8	8	8	8	12	6	-
Expansions	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GPS Lap Timer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Low side Digital Output	-	-	-	2	2	2	2	1	1	1	-	-	-
High Power Dig. Out	-	-	2	-	10	-	-	-	-	-	32	8	-
Wi-Fi connection	✓	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-
Inertial platform	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Recording capability	4GB	4GB	4GB	4GB	-	4GB	4GB	-	-	-	4GB	4GB	4GB
Alarms LEDs	-	-	2	6	6	5	8	6	5	8	34	10	4
Shift lights	10	10	5	10	10	10	10	10	10	10	-	-	8
Body	Nylon fiber	Nylon fiber	Nylon fiber	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum

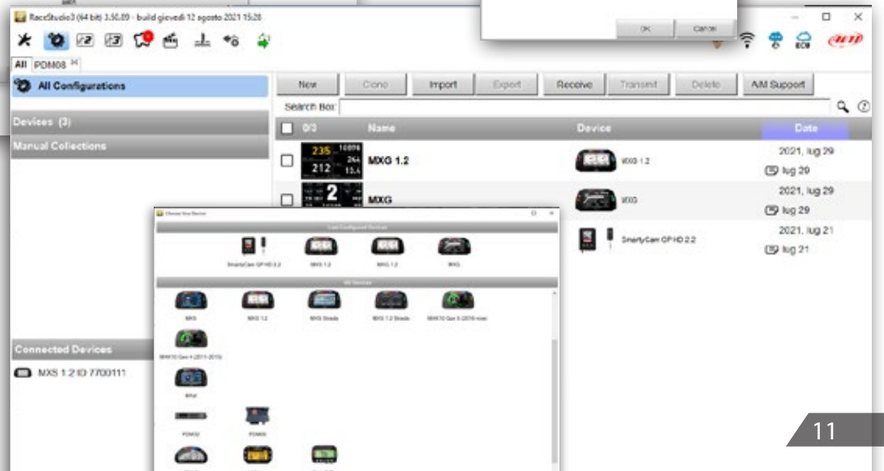
RS3
RACESTUDIO

Race Studio 3, where it all begins..

Race Studio 3 is the true 'engine' of every device, as it will manage all your activities.

With Race Studio 3 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 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 Race Studio 3 can give, allowing you full control of your engine and your performances, there are a lot of free seminaries and webinars that allow you to achieve your goals and become a Pro.

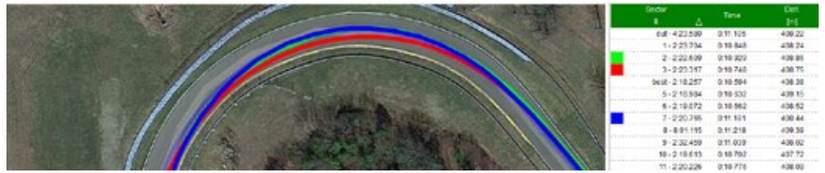
AIM SPORTS LEARNFAST
WEBINAR SERIES

Analysis 3

Your performances at your fingertips

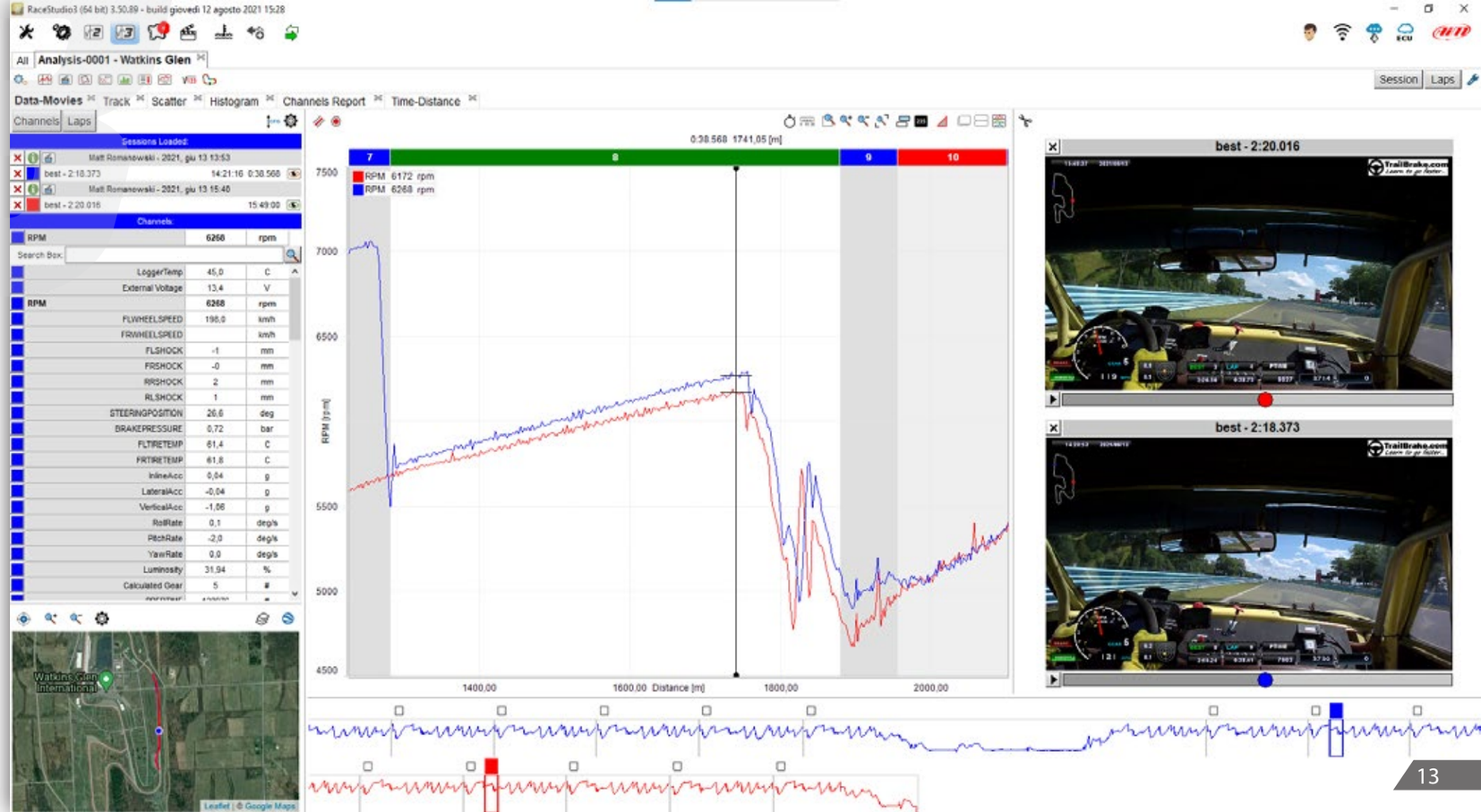
AiM Software is the "cockpit" of all our devices.
RS3 is constantly updated and developed by our team of engineers that work with great attention to details, aiming to improve user experience both in configuration and analysis as well as to propose innovative and efficient solutions to make the interaction with **AiM** products intuitive, customizable and reliable.

With the new **ANALYSIS 3 Race Studio 3** software enable 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.



Data analysis has never been so accurate

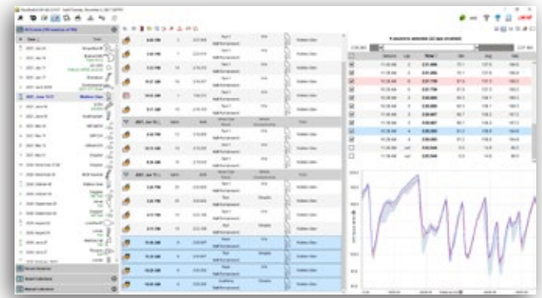
With the new **ANALYSIS 3, AiM** have done huge implementations in terms of features, accuracy and user-dedicated functionalities, positioning **Race Studio 3** a cut above our competitors.



Analysis 3
New features

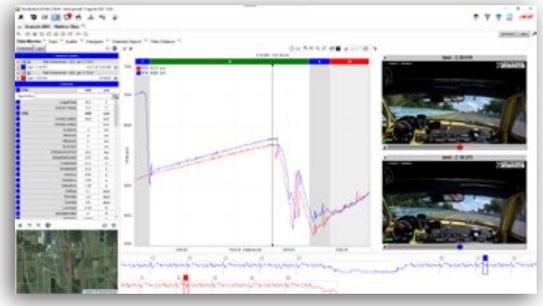
Preview and Comparison

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



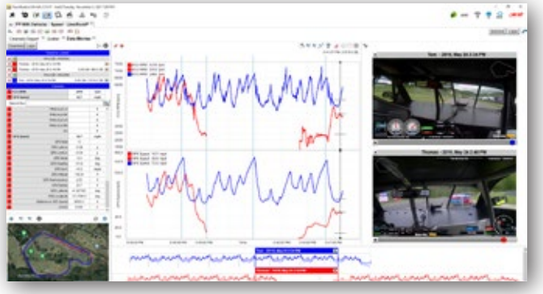
Smart Sync

Import your data and your videos (from any **AiM** SmartyCam) and the powerful **RS3 Analysis 3** synchronization engine will use the GPS stream to automatically link.
Show data and video in a dedicated view will be just one double-click away.



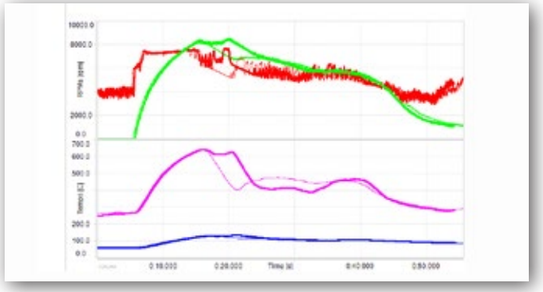
World timing

Sessions views base upon world timing (considering time zones and DST information). You can compare several cars within a race, plot cursor being the time of the day. Merge of racing stints is automatic.



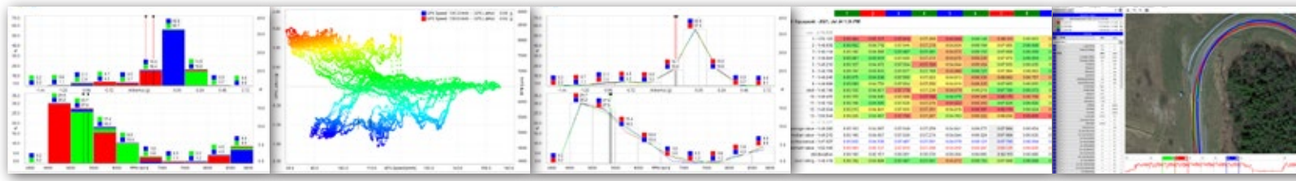
Dedicated views for Track races, Dragster, Oval

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.



SW4

More than a steering wheel

- 4 GB datalogger
- Easy and fast connection to more than 2,000 ECUs
- 8 CAN output freely configurable pushbuttons
- 2 free contacts pushbuttons
- 3 freely configurable eight positions CAN output rotary switches
- 2 Paddleshift – CAN Output and free contacts
- Freely configurable display pages
- Multiple Expansions
- Shift lights

4 GB datalogger inside

NEW

Individually configurable pushbuttons

8 completely configurable buttons and 2 additional free contact buttons.

One by one configurable LEDs

Shift lights can be configured for each gear, choosing LED color and RPM threshold values which will turn it on/off. The 4 Alarms LEDs are configurable too.

A wide range of expansions

With the new SW4, you have all the functionalities of a logger, you can have different expansions, and thanks to the optional GPS09 Module, as you start a track session, lap and split times as well as speed, position and acceleration...
All the information you need for engine tuning as well as for improving your driving technique.

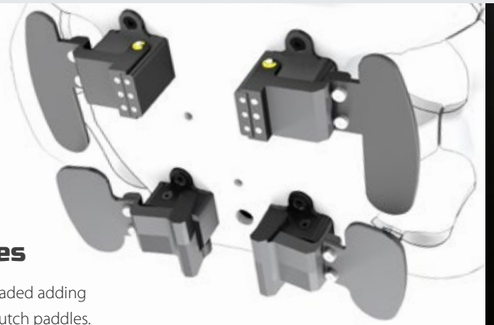
Freely configurable pages

The high contrast TFT display offers a wide range of possible graphic data layouts, showing all the information you needs in real time.

Rotary switches

SW4 has 3 completely configurable rotary switches.

NEW



Clutch and shift paddles

The SW4 can be upgraded adding paddle shifters and clutch paddles.

Maximum grip and comfort

The ergonomic handle grips are made of high-density polyurethane, designed for the best grip and comfort in any racing situation, and they're fully replaceable.

Need more info?
SCAN HERE

Technical specifications

Diameter	**ø 270 mm**	**ø 280 mm**	**ø 320 mm**	**ø 350 mm**
Display	4.3" TFT		5" TFT	
Resolution	800x480 pixels			
Contrast	800:1			
Brightness	800 cd/m2 - 1,100 Lumen			
Ambient light sensor	Yes			
Alarm display icons	Yes, freely 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			
Expansion CAN connection	GPS Module, SmartyCam, Shift Light, Module, RIO02 Channel Expansion, TC Hub, Lambda Controller,			
Internal memory	4 GB			
Body	Anodized Aluminum			
Pushbuttons	10 pushbuttons + 3 rotary switches (all with RGB backlights)			
Connectors	1 Deutsch Autosport 22 pin male connector			
Dimensions	270 x 183.5 x 42.6 mm		320 x 183.5 x 42.5 mm	
Weight	2,400 g		2,600 g	
Power consumption	500 mA			
Waterproof	IP65			

NEW

SMARTYCAM 3

The ultimate motorsport cameras with real time data overlayed on videos

SMARTYCAM 3

NEW

The videocameras designed for motorsport with real time data overlayed on videos

The new **SmartyCam 3** cameras have been designed for motorsport with a single purpose: providing great videos including all the technical information that will help you improving your performance.

All this in the most robust and reliable system ever. In its new version, electronics and mechanics have been furtherly improved, and **SmartyCam 3** cameras are now even easier to manage.

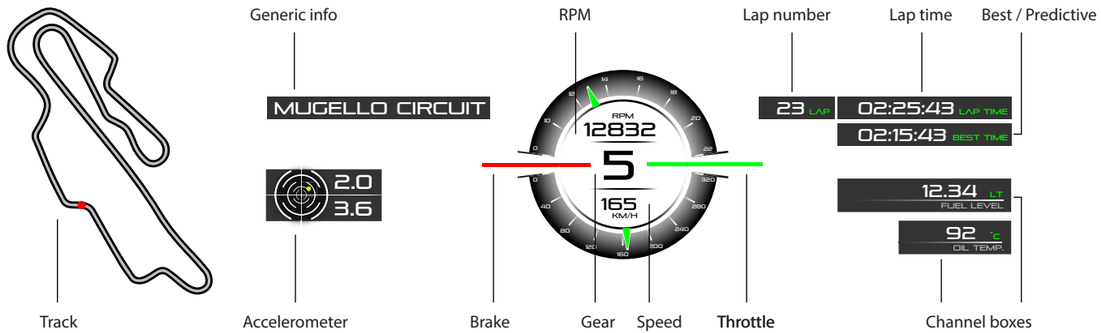
Configurable overlays

With **SmartyCam 3** you can choose which information to overlay and select different styles and graphics rappresentation that AiM continuosly update. Not enought?
In addition, you can freely move every element on the screen; no condition at all, it's all up to you.

SmartyCam 3 cameras overlay all the data you need 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, temperatures, pressures and - in presence of additional sensors - also their values.

All these info will be overlayed on videos in each single point of the track.



NEW

Automatic Start & Stop

You are on the starting grid, ready to sprint, your adrenaline reaching the climax: the last thing you can worry about is... switching on the camera. You have other things to worry about. SmartyCam 3 is aware of that.
That is why it switches on/off automatically and starts/stops recording the same way.

Designed for the extreme

An on-board camera designed for motorsport must guarantee great resistance against the extreme working conditions typical of racing and against the most adverse weather, such as: strong and prolonged vibrations, continuous rain and extremely high and low temperatures. That is why **SmartyCam 3** are IP65 waterproof and made in machinery molded aluminum, just like many competition car parts.

No “Wave Effect“ with Global Shutter CMOS

Engine rumble causes vibrations, which are a big problem for video recording.

You will never experience again that seasick “wave effect” you get watching videos recorded by a generic camera when the car rolls at 7,000 RPM.
SmartyCam 3 cameras have been designed for that environment and for those vibrations. “Wave effect” is just a distant memory.

Video Output

If you need to stream your video in real time an SDI output is available on **SmartyCam 3 GP** and **SmartyCam 3 DUAL**.

High quality with small size video files

Generic HD cameras are focused on the highest pixel 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 a perfect balance between video quality and file size. You can choose among three video file quality levels: one-hour recording takes 4 GB (high quality), 2 GB (normal) or 1,5 GB (low).

Full internal datalogger

All the data received from CAN and internal sensors are recorded in .mov files produced at the end of your test, your SD (or MSD) Card contains all the information you need for a deep data analysis.
SD card sold separately.

SMARTYCAM 3 SPORT

- Global shutter CMOS sensor
- 1920X1080 FHD 30 fps H.264
- Support for up to 2 TB Micro SD card
- Display resolution: 128x128 pixels
- 84° angle lens
- Internal, rechargeable lithium battery 350mAh
- 9-15 Volt External Power
- Three-axial ± 16G accelerometer
- -10°C/+60°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.

The new **quarter turn locking system** assures the best performance in terms of safety and closing speed.

Global shutter FHD 30 fps

MOTORSPORT ACTION CAMERAS

SMARTYCAM 3

- Global shutter CMOS sensor
- 1920X1080 FHD 60 fps H.264
- Display resolution: 128x128 pixels
- 67° / 84° / 120° angle lens
- Internal, rechargeable lithium battery 350mAh
- 9-15 Volt External Power
- Support for up to 2 TB SD card
- Three-axial ± 16G accelerometer
- -10°C/+60°C temperatures working range
- Auto Power ON/OFF
- Auto Start/Stop recording
- USB Type-C connector
- Internal and external Mic
- Internal AiM CAN Hub
- CAN ECU

Global shutter FHD 60fps

NEW

The Benchmark of Motorsport Action Camera

SmartyCam 3 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.

MOTORSPORT ACTION CAMERAS

SMARTYCAM 3 GP

- Global shutter CMOS sensor
- 1920X1080 FHD 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
- Three-axial ± 16G accelerometer
- 2 Binder 712 female connectors + 2 SMA
- -10°C/+60°C temperatures working range
- Auto Power ON/OFF
- Auto Start/Stop recording
- Display Port Output

High quality videos from another perspective

SmartyCam 3 GP is for who needs external video and has very little space for installation. The brand new **AiM** Bullet-Cam features an internal battery of 1,250 mAh, 3 axis ± 16 G accellerometer.
SmartyCam 3 GP is designed to be installed out from the vehicle, it is pefectly confortable from – 10° to + 60° Celsius and the bullet is rated IP67 waterproof, to face the most extreme condition of racing.

Global shutter
FHD 60 fps

The Bullet-Cam designed for motorsports

Featuring 2 Binder 712 female connectors plus 2 SMA female connectors, the new **SmartyCam 3 GP** has now a Display Port Output.
Transmit data with Display Port cables can achieve a higher bandwidth than other cables. With a higher bandwidth the cable transmits more signals at the same time.
Just like its precursor, the new **SmartyCam 3** doesn't need an ECU Bridge to acquire data from your vehicle because it can be directly connected to your vehicle's ECU:plug in, play and be ready to record your on-board videos and to improve your performance by analysing the data overlay!

NEW

SMARTYCAM 3 DUAL

- Global shutter CMOS sensor
- 1920X1080 FHD 60 fps H.264
- Display resolution: 240x320 pixels
- Double video input
- 67° / 84° /120° angle lens
- Internal, rechargeable lithium battery 4800mAh
- Internal 64 GB SSD
- 9-15 Volt External Power
- Support for up to 2 TB SD card
- Three-axial ± 16G accelerometer
- -10°C/+60°C temperatures working range
- Auto Power ON/OFF
- Auto Start/Stop recording
- 1 SMA Video Output
- 2 SMA Video Input
- Deutsch 22 pin
- Ethernet 1 Gigabit
- CAN / RS232 ECU connection

Dual global shutter FHD 60 fps

NEW

If One is great, Dual is Better

Smartycam 3 DUAL is the flagship version of **SmartyCam 3** range, designed for any racer who wants to get the most out from his performance video on the track.
Dual FHD camera system, internal 64 GB solid state disk, 1 gigabit ethernet data transfer protocol, 4800 mAh lithium battery are only few of the features of this exclusive version of **SmartyCam 3**: the most powerful of our range.

SMARTYCAM 3 RANGE

NEW

Technical specifications

	SPORT	SMARTYCAM 3	GP	DUAL
Video format	H.264 1920 x1080 pixels @ 30 fps	H.264 1920 x1080 pixels @ 60 fps		
Display Resolution	128 x128 pixels		240 x 320 pixels	
Field of view	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		
Internal SSD memory			Up to 64 GB	
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 Deutsch 22 pin 1 SMA SDI Video out 2 SMA bullet connection 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 lenght	-		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 900 g Bullet 45 g
Waterproof	IP65			

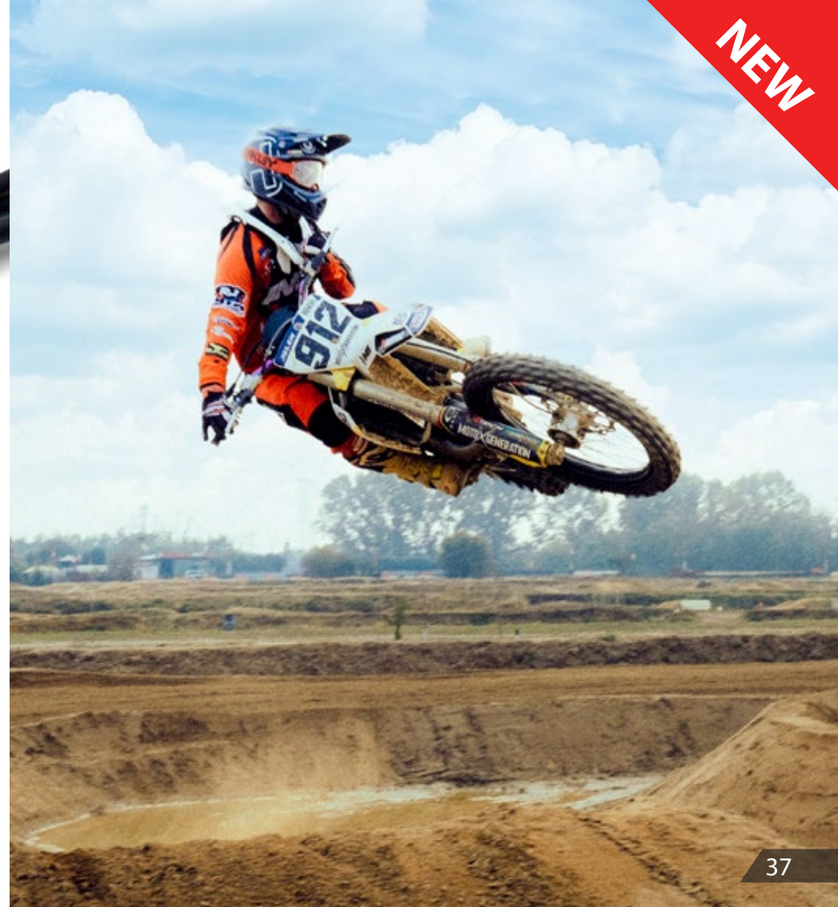
MOTOCROSS ECUs

TAIPAN

- Plug & Play
- High technology 32-bit core
- Advanced Base Map
- Up to five selectable maps
- Advanced strategies
- More power at the wheel

The ECUs designed and developed for the motocross world

Taipan is the brand-new aftermarket plug & play ECU created by AiM, exclusively designed for off-road motorcycles.
Thanks to its high technology 32-bit core, it represents an important step forward to improve the performances of your motorcycle, without sacrificing reliability and smoothness.



High technology 32-bit core

Engine control requires precision.
At 20,000 RPM Taipan ECU guarantees a precision of 1/10 of degree:
this means an accuracy within 0.8 µsec for turning the spark ON!

This precision is the key to guarantee:

- A VERY CONSISTENT ENGINE ROTATION
- THE POSSIBILITY TO REPEAT DOZENS OF TESTS AT THE BENCH ALWAYS OBTAINING THE SAME EXACT RESULT
- A PERFECT REACTIVITY AT EVERY MINIMUM CHANGE OF ANY POINT OF A MAP
- MORE POWER AT THE WHEEL

Plug & Play

See the compatible models :

FULLY PLUG & PLAY MODELS FOR MOST OF THE MOTOCROSS MOTORCYCLES


GAS GAS


KTM


KAWASAKI


HUSQVARNA


HONDA

NEW

Up to five selectable maps

Taipan can manage up to five maps that can be selected both by OEM switches (Honda, Husqvarna, KTM) or even more easily by the AiM Handlebar Switch.

HBS - Handlebar Switch

If you like to have a very flexible and comfortable switch, the one AiM proposes features 2 pushbuttons and 10 LEDs and manages the following settings:

- RUNNING MAP CHANGE
- FUEL CORRECTIONS
- TRACTION CONTROL
- LAUNCH CONTROL

UC-Bridge

HBS - Handlebar Switch

TAIPAN Y


YAMAHA

TAIPAN Y is the brand-new dedicated version of **TAIPAN ECU**, specifically designed for **Yamaha** motocross motorcycles.
Our technicians are continuosly developing upgrades for new models. If you don't find yours, keep an eye on our site: we are working for you!

Extra Analog Inputs

2 analog inputs manage external sensors such as barometric air pressure to improve the bike performance.

Extra Digital Outputs

2 outputs, one dedicated to a second injector and another free to add another device like, for example, a water pump.

Advanced Base Map

A base map that immediately makes the bike more performing than the OEM control units.

Advanced Strategies

Strategies can be configured for second injectors, quick shift, launch control, traction control and all the important parameters that a rider needs.

Need more info?
SCAN HERE

TAIPAN

HALL OF FAME 2021

Lukas Höllbacher
KTM MTR Team - KTM

- FIM Supermoto World Championship S1GP class **third place overall**
- Spanish Supermoto Championship **winner**

Youry Katherine
Gazza Racing Team – Honda

- FIM Supermoto European Championship S2GP **winner**

Romain Kaivers
KTM MTR Team – KTM

- FIM Supermoto European Championship S2GP **second place**

Andrea Belotti
TNT Corse – KTM

- FIM European Enduro championship senior class **winner**
- FIM Enduro Open World Cup senior class **winner**

Technical specifications

NEW

Additional characteristics to the stock ECU

Additional inputs	Two 0-5V analog inputs sampled at 1,000 Hz each,
Additional outputs	Second injector driver for high impedance saturated injectors (12 Ohm) One low side driver (1A)
CAN connectors	2 CAN bus, one for calibration purposes, one for expansions (AiM handlebar switch, dataloggers, dash ecc.)
Power consumption	150 mA
Connectors	n.1 JST 04T-JWPF-VSLE-S Connector n.1 JST 08R-JWPF-VSLE-D Connector n.1 JST 04R-JWPF-VSLE-S Connector n.1 33 pin male Connector
Body	PA6 + 30% glass fiber

	TAIPAN	TAIPAN Y
Dimensions	108.4x75.4x29.3 mm	88.4x95.1x30.4 mm
Weight	260 g	260 g
Waterproof	IP67	IP67

ATV ECU

YARARA

- Plug & Play
- High technology 32-bit core
- Advanced Base Map
- Up to five selectable maps
- Advanced strategies
- More power at the wheel

Full control in your hand

Now you are able to select the best map for every situation, in every moment, just using your thumb.
The new **AiM HBS** Handlebar switch features 2 pushbuttons and 10 LEDs and manages the following settings:

- RUNNING MAP CHANGE
- FUEL CORRECTIONS
- TRACTION CONTROL
- LAUNCH CONTROL

HBS Handlebar switch

The ECU designed and developed for the ATV world

YARARA is the brand-new aftermarket plug & play ECU developed by AiM, exclusively designed for ATVs.
Thanks to its high technology 32-bit core, **YARARA** is the best solution to improve the performances of your ATV.
Yarara is specifically designed for:

- ATV Yamaha YFZ450R
- ATV Yamaha Raptor 700 R

Technical specifications

NEW

Additional characteristics to the stock ECU

Additional inputs	Two 0-5V analog inputs sampled at 1,000 Hz each
Additional outputs	Second injector driver for high impedance saturated injectors (12 Ohm) One low side driver (1A)
CAN connectors	2 CAN bus, one for calibration purposes, one for expansions (AiM handlebar switch, dataloggers, dash ecc.)
Power consumption	150 mA
Connectors	n.1 JST 04T-JWPF-VSLE-S Connector n.1 JST 08R-JWPF-VSLE-D Connector n.1 JST 04R-JWPF-VSLE-S Connector n.1 34 pin male Connector
Body	PA6 + 30% glass fiber
Dimensions	141.5X84.3X26.9 mm
Weight	270 g
Waterproof	IP67

TFT DASH LOGGERS

MXS 1.2	**5”**
MXP	**6”**
MXG 1.2	**7”**

- 5”/6”/7” High Contrast TFT Display
- Fully user configurable Multi page Display
- RGB alarm LEDs and icons
- 10 RGB LEDs shift lights array
- Wi-Fi connectivity to PC
- 3 CAN ports
- Connection with 2,000+ industry leading ECUs, CAN, K-Line, RS232 protocol
- Three - axis accelerometer + gyroscope
- 8 analog (thermocouple, 0-5V, 0-12V) inputs at a max of 1,000 Hz each
- 4 digital speed inputs
- Coil RPM input
- Lap signal input
- 2 One Amp digital outputs
- Analog Camera Input
- Realtime fully configurable math channels
- GPS + Glonass receiver
- Automatic track recognition at power on

MXG 1.2

MXS 1.2

MXP

The color TFT Dash Loggers in three different display sizes

Fully compatible Dash Loggers, with the same core, connectors and features but available in different sizes: 5”, 6” or 7”, all of them with High Contrast TFT display whose brightness is managed by an ambient light sensor, in order to keep the light at the best level.

Display	MXS 1.2: 5"TFT - MXP: 6"TFT - MXG 1.2: 7"TFT
Resolution	800x480 pixels
Brightness	700cd/m2 - 1,100 Lumen
Ambient light sensor	Yes
Alarm LEDs	MXS 1.2: 6 RGB freely configurable MXP: 5 RGB freely configurable MXG 1.2: 8 RGB freely configurable
Alarm display icons	Freely configurable
Shift Lights	10 integrated freely configurable RGB LEDs
CAN connections	3
ECU connections	CAN, RS232 or K-line
ECU compatibility	2,000+ industry leading ECUs
Expansion CAN connection	GPS, Channel Expansion, Lambda Controller, SmartyCam
Analog inputs	8 fully configurable, max 1,000 Hz each
Digital inputs	4 Speed inputs, lap signal, coil RPM input
Digital outputs	2 (1 A max each)
Second CAN	Yes
Accelerometer	Internal Three-axial ± 5g+Gyro
Internal memory	4 GB
Body	Anodized Aluminum
Pushbuttons	Metallic
Connectors	2 Motorsport connectors +1 Binder connector
Dimensions and Weight	MXS 1.2: 169.4x97x23 mm - 530 g MXP: 189.6x106.4x24.9mm - 640 g MXG 1.2: 237x127.6x26 mm - 950 g
Waterproof	IP65

TFT DASHES

MXS 1.2 Strada	5”
MXP Strada	6”
MXG 1.2 Strada	7”

- 5”/6”/7” High Contrast TFT Display
- Fully user configurable Multi page Display
- RGB alarm LEDs and icons
- 10 RGB LEDs shift lights array
- 2 CAN ports
- Connection with 2,000+ industry leading ECUs, CAN, K-Line, RS232 protocol
- Three - axis accelerometer + gyroscope
- 8 analog (thermocouple, 0-5V, 0-12V) inputs at a max of 1,000 Hz each
- 1 digital speed inputs
- Coil RPM input
- Lap signal input
- 1 One Amp digital outputs
- Analog Camera Input
- Realtime fully configurable math channels
- GPS + Glonass receiver

MXG 1.2 Strada

MXS 1.2 Strada

MXP Strada

The TFT Dashes in three display sizes for road use

MXG 1.2 Strada, MXP Strada and MXS 1.2 Strada feature three color display with great visual impact, configurable to show lap times and all the info coming from the Engine Control Unit, analog/digital inputs, pre-defined math channels and - optionally - the GPS09 Module.
The data sampling capability can be increased adding up to eight expansion modules.

New Track-Kit with Strada Logger!

You have been improving your driving skills but now it’s time to walk the extra-mile to drop that second down! Stepping your game up is the reason “Track-Kit” has been designed for.
AiM Track-Kit allows you to unleash the full potential of AiM MXS 1.2 Strada.
Composed by the GPS09 Module, a dedicated Strada Logger and the Data HUB, Track-Kit makes AiM MXS 1.2 Strada able to log data which you can analyze through our software Race Studio 3 when you are still at the track or, once left it, to finally understand what you did right or wrong on the circuit and then improve your performance.

Technical specifications

Display	MXS 1.2 Strada: 5"TFT - MXP Strada: 6"TFT - MXG 1.2 strada: 7"TFT
Resolution	800x480 pixels
Brightness	700cd/m2 - 1,100 Lumen
Ambient light sensor	Yes
Alarm LEDs	MXS 1.2 Strada: 6 RGB freely configurable MXP Strada: 5 RGB freely configurable MXG 1.2 Strada: 8 RGB freely configurable
Alarm display icons	Freely configurable
Shift Lights	10 integrated freely configurable RGB LEDs
CAN connections	2
ECU connections	CAN, RS232 or K-line
ECU compatibility	1,000+ industry leading ECUs
Expansion CAN connection	GPS, Channel Expansion, Lambda Controller, SmartyCam
Analog inputs	8 fully configurable, max 1,000 Hz each
Digital inputs	1 Speed inputs, lap signal, coil RPM input
Digital outputs	1(1 A max each)
Second CAN	Yes
Accelerometer	Internal Three-axial ± 5g+Gyro
Internal memory	4 GB
Body	Anodized Aluminum
Pushbuttons	Metallic
Connectors	2 Motorsport connectors +1 Binder connector
Dimensions and Weight	MXS 1.2 Strada: 169.4x97x23 mm - 530 g MXP Strada: 189.6x106.4x24.9mm - 640 g MXG 1.2 Strada: 237x127.6x26 mm - 950 g
Waterproof	IP65
Track Kit Strada Logger	Optional

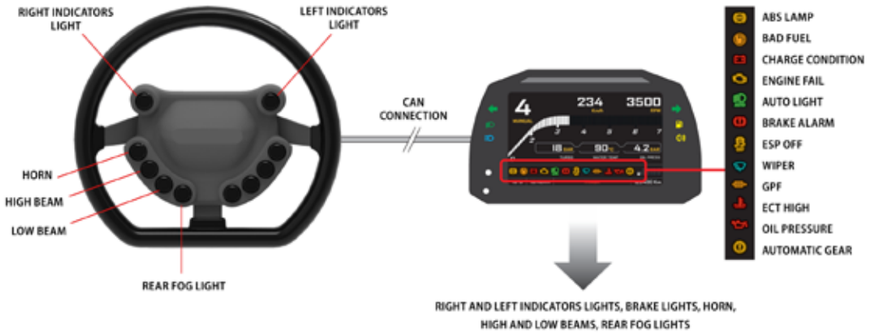
TFT DASH CONTROLLER

MXsl

- 5"TFT Display
- 800x480 pixels Resolution
- 600:1 Contrast
- 700cd/m2 - 1,100 Lumen Brightness
- Ambient light sensor
- 6 configurable RGB Alarm LEDs
- 10 configurable RGB LEDs Shift Lights
- 2 AMP connectors + 1 Binder connector
- Connection with 2,000+ industry leading ECUs, CAN, K-Line, RS232 protocol
- 3 CAN connections
- 8 fully configurable analog, digital pull up/down on/off - Max 1,000 Hz each
- External modules connection: GPS09 Module, Channel Expansion, TC Hub, Lambda Controllers, SmartyCam
- 2 Low Side Digital Output (1A max)
- 8 High Side Digital Outputs (5A max)
- 2 High Side Digital Outputs (10A max)

The power and compact module Dash completely configurable

MXsl is a completely configurable 5" dash controller that, beyond the typical features of a dash, like ECU connection, analog/digital Inputs, GPS management etc., offers 10 useful High-Power Outputs that can be used for directly powering motors, lights, fans, pumps, electronic devices, without any necessity of conventional relays and fuses.
The harness becomes extremely simplified and the flexibility is the status of art.



It detects shortcuts, overcurrents and open circuits, recording the faults for a complete diagnosis and showing, if required, the proper information on the screen.
Each output can be configured to be activated by a combination of math channels, analog/digital inputs, pushbuttons or ECU fields, programming even the maximum absorbed current.

Technical specifications

Display	5"TFT
Resolution	800x480 pixels
Contrast	600:1
Brightness	700cd/m2 - 1,100 Lumen
Ambient light sensor	Yes
Alarm LEDs	6 RGB freely configurable
Shift Lights	10 freely configurable RGB LEDs
CAN connections	3
ECU connections	CAN, RS232 or K-line
ECU compatibility	2,000+ industry leading ECUs
Expansion CAN connection	GPS09 Module, Channel Expansion, TC Hub, Lambda Controllers, SmartyCam
Inputs	8 fully configurable: analog, digital, pull up/down on/off Max 1,000 Hz each
Speed Input	1
RPM Input	1
Digital outputs Low Side	2 (1A Max)
Digital outputs High Side	10 protected (overcurrent, short circuit to GND and to battery, overtemperature, open load detection, current fuse programmable) Eight 5 A outputs, two 10 A outputs Current sense Output PWM capable (100 Hz to 400 Hz)
Internal memory	4 GB
Connectors	2 AMP connectors
Dimensions	169.4x97x23 mm
Weight	480 g
Power consumption	400 mA without power output lines active
Waterproof	IP65

LCD DASH LOGGER

MXm

- High contrast LCD display
- Wi-Fi connectivity
- Connections with 2,000+ industry leading ECUs
- 3-axis accelerometer + gyroscope
- Coil RPM input
- 2 digital outputs
- Realtime fully configurable math channels

All the racing data you may ever need

MXm is the powerful AiM dash logger providing all the info needed by racers: it samples and shows speed, laptimes, RPM, all temperatures/pressures data you need and much more.
It has been designed to make configuration and usage smooth and easy both for amateurs and for people with sophisticated technical background.

- 7 colors configurable backlight
- 2 configurable RGB alarm LEDs
- 5 RGB LED shift light array
- 2 CAN connections
- 4 analog inputs at a max 1,000 Hz each
- 2 digital speed inputs
- Coil RPM input

A wide range of data sources

This dash logger samples data coming from your ECU, the internal accelerometer and gyro, from the GPS09 Module, from analog/digital inputs and from predefined math channels.
For the most demanding, the system can be connected to AiM LCU-One Lambda controller and to SmartyCam 3.

Technical specifications

	MXm
Display resolution	268 x 128 pixels
Backlight	7 configurable RGB colors
Ambient light sensor	Yes
Shift Lights	5 configurable RGB LEDs
Alarm LEDs	2 configurable RGB LEDs
CAN connections	2
ECU connections	CAN, RS232 or K-Line to 1,000+ industry leading ECUs
GPS	Integrated
External modules	LCU-One Lambda controller, SmartyCam
Analog inputs	4 fully configurable, max 1,000 Hz each
Digital inputs	2 Speed inputs, coil RPM input
Digital outputs	2 high-side max 10 A
Inertial platform	Internal 3 axis ±5g accelerometer + 3 axis gyro + 3 axis magnetometer
Wi-Fi connection	Yes
Internal memory	4 GB
Body	Glass fiber reinforced Nylon
Pushbuttons	Metallic
Connectors	37 pins Motorsport connector + 4 pins power connector
Dimensions	137x88.4x31.9 mm
Weight	330 g
Waterproof	IP65

EVO4S
EVO5

- Connection with 2,000+ industry leading ECUs
- Lap signal
- Coil RPM input
- Internal 3 axis ±5g accelerometer + 3 axis gyro
- CAN output
- GPS included in the kit
- External modules connection
  (Channel Expansion, TC Hub, Lambda controller, SmartyCam)
- 4 GB internal memory

EVO4S

- 5 fully configurable analog inputs, max freq. 1,000 Hz each
- 2 Speed inputs
- 1 Digital Output (1 A max)

EVO5

- 8 fully configurable analog inputs, max freq. 1,000 Hz each
- 4 Speed inputs
- 2 Digital Output (1 A max)
- SD card slot
- Second CAN
- Wi-Fi Connection

EVO4S

The powerful and flexible data logger

EVO4S is the evolution of the traditional data logger that, all over the years, has become a standard de facto acquisition system in a huge amount of championships.
With its compact aluminum body, it can be easily placed in any vehicle.
Its configuration with the **Race Studio 3** software is simple and immediate.

EVO5

The professional data logger

EVO5 is one step beyond. The SD card slot is the fastest way to grab data out of a vehicle when this is pitting.
Wi-Fi offers an alternative access to the unit. Two Motorsport connectors, 8 analog inputs, 4 wheel speeds and a second CAN bus complete this professional package.

A wide range of sources

EVO4S and **EVO5** loggers are designed to sample all the information you need.

Data come from your vehicle ECU via CAN, RS232 or K-line, from the internal accelerometers and gyro, from the GPS09 Module included in the kit and from analog/digital inputs, external expansions as well as predefined math channels.
Sensors can be easely connected to the configurable analog channels, to the RPM input and to the wheel speed inputs.

ECU connection

EVO4S and **EVO5** sample data from the ECU of your vehicle.
The list of available ECU drivers, constantly updated and upgraded, includes 2,000 + different ECUs, either Stock and Racing.

They are sorted by manufacturer/vehicle model: for each ECU you can find the proprietary communication protocols, including the standard OBDII ones.
From a hardware point of view, AiM systems manage the following data lines: CAN, RS232, K-Line.

EVO4S Sensors connection

A large number of sensors can be connected to **EVO4S** via:

- 5 analog channels with configurable 12 bit 0-5 Volt, 0-500 mV, 0-50 mV inputs or thermocouple input, used to sample data coming from temperature, pressure, suspension and other kinds of sensors.
- 2 speed inputs
- 1 RPM input, which manages square wave signals transmitted by the ECU or pulse signals picked from the coil command (low voltage)

View your parameters and alarms

Two different solutions allow to display vehicle parameters logged by **EVO4S/EVO5**. Shift lights and alarm LEDs complete the information supplied to the driver.
SW4
Dedicated to Formula and Sports cars.
GS-Dash
The compact solution for tight cockpits.

Digital output

1A at 12 Volts are output by **EVO4S/EVO5**: they can be configured in order to be turned On/Off according to the set strategy.
They permit to automatically run external systems, activate/de-activate a cooling fan or circulation pumps, i.e. to switch on/off additional lights, etc. when a certain event happens.
One output is available on EVO4S, two on EVO5.

Internal three-axial accelerometer and gyro

A built-in inertial platform: an integrated three-axial accelerometer and gyro sensor let you have the most powerful system to understand oversteering, understeering, banking, etc.

CAN output

With the CAN Output you can send messages directly to an existing CAN network in order to improve the range of the vehicle control possibilities.

Expand your EVO4S/EVO5

Add expansion modules via our built in CAN bus eg. Channel Expansions, Lambda controllers and displays.
These are only some of the items that can be added to our **EVO4S/EVO5** range for incrementing the performance and the sampled data.

EVO5 Sensors connection

Many sensors can be connected to **EVO5**:

- 8 analog channels with configurable 12 bit 0-5 Volt, 0-500 mV, 0-50 mV inputs or thermocouple input, used to sample data coming from temperature, pressure, suspension and other kinds of sensors.
- 4 speed inputs.
- 1 RPM input, which manages square wave signals transmitted by the ECU or pulse signals picked from the coil command (low voltage).

EVO5 Second CAN line

The CAN2 line manages data coming from your additional modules (i.e. ABS, traction control, infrared temperature sensors and more...). This feature meets the requirements of a growing number of racers, as the use of additional modules is becoming quite common in a number of series.

EVO5 Wi-Fi connectivity

Configure, calibrate and download your data wirelessly over a secure 802.11 Wi-Fi connection.

EVO5 Store all your data in a SD card

The internal SD card permits to record all possible data you may ever need.
The card is protected by a waterproof door equipped with a sensor closing all files when you open it, to prevent any data loss possibility. Of course a USB connection is available too.

	EVO4S	EVO5
ECU connection	CAN, RS232 or K-Line to 2,000+ industry leading ECUs	CAN, RS232 or K-Line to 2,000+ industry leading ECUs
External modules	GPS09 Module, Channel Expansion, TC Hub, Displays, Lambda controller, SmartyCam	GPS09 Module, Channel Expansion, TC Hub, Displays, Lambda controller, SmartyCam
Analog inputs	5 fully configurable, max 1,000 Hz each	8 fully configurable, max 1,000 Hz each10 configurable RGB
Digital inputs	2 speed inputs, lap signal, RPM input	4 speed inputs, lap signal, RPM input
Digital outputs	1 (1A max)	2 (1A max)
Inertial platform	Internal 3 axis ±5g accelerometer + 3 axis gyro	Internal 3 axis ±5g accelerometer + 3 axis gyro
Second CAN	-	Yes
Wifi connection	-	Yes
Internal memory	4 GB	4 GB
Removable SD card	-	Up to 128 GB
Connectors	13 Binder connectors	2 Motorsport connectors 37-22 pin
Body	Anodized aluminum	Anodized aluminum
LEDs	1 system status	1 system status
Dimensions	130x35x46.6mm	114.4x47.2x58.86mm
Weight	330 g	300 g
Waterproof	IP65	IP65

POWER DISTRIBUTION MODULES

PDM Kit

- New INTEGRATED Power Distribution Module
  + 4 gigabytes datalogger
  + Dash controller
- 6" or 10" Dash
- 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

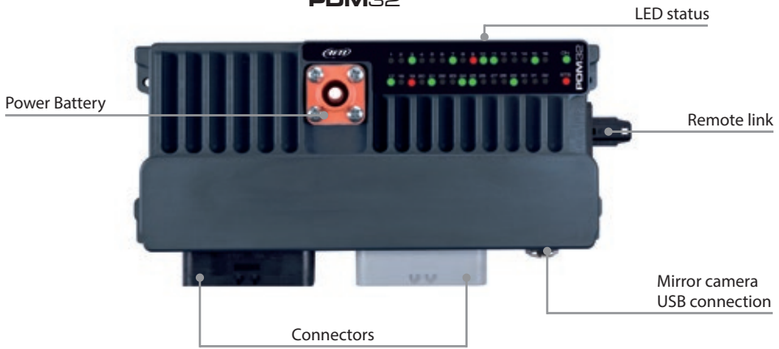
Much more than a Power Distribution Module

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.
At the center of vehicle electronics, the harness and installation are simplified and offer more control.

PDM08

PDM32



Technical specifications

	PDM32	PDM08
Input	14 fully configurable, max 500 Hz each: 8 analog/digital Pull up/down 4 digital inputs 2 speed input	6 fully configurable, max 500 Hz each Pull up/down 2 speed input
Power outputs	4 rated up to 20 A (high power) 12 rated up to 15 A (mid power) 12 rated up to 10 A (low power) 4 rated up to 35 A (Half Bridge) Protected for: over voltage, under voltage, over current, over temperature, short circuit Total max current: 120 A	1with series 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 , short circuit Total max current 100 A
Lin bus	1	1
CAN connectors	3	3
Inertial platform	3 axis ±5G accelerometer + 3 axis gyro + 3 axis magnetometer	3 axis ±5G accelerometer + 3 axis gyro + 3 axis magnetometer
Internal memory	4 GB	4 GB
External modules	GPS09 Module, Channel Expansion, TC Hub, Lambda Controller, SmartyCam, Remote IO Pushbutton Module	GPS09 Module, Channel Expansion, TC Hub, Lambda Controller, SmartyCam, Remote IO Pushbutton Module
Remote display connection	1 AiM stream output	1 AiM stream output
External Analog Camera input	2	-
Body	Anodized aluminum	Anodized aluminum
Dimensions	223 x 94.6 x 49.5 mm	161 x 100.6 x 50.6 mm
Weight	740 g	370 g
Waterproof	IP65	IP65

PDM DASHES

Both PDMs support 6” and 10” dashes. Thanks its wide range of available graphic layouts, they are fully user configurable through our **Race Studio 3** configuration software.

	Display 6”	Display 10”
Display	6”TFT	10”TFT
Display resolution	800x480 pixels	1280x480 pixels
Contrast	600:1	1100:1
Brightness	700cd/m2	800cd/m2
Alarm display icons	Yes, freely configurable	Yes, freely configurable
Shift Lights	10 configurable RGB LEDs colors	10 configurable RGB LEDs colors
Alarm LEDs	5 configurable RGB LEDs colors	6 configurable RGB LEDs colors
Connectors	1 Rosenberger	1 Rosenberger
Body	Anodized Aluminum	Anodized Aluminum
Pushbuttons	Metallic	Metallic
Dimensions	189.6x106.4x24.92mm	278 x135 x 37.2mm
Weight	640 g	1035 g
Waterproof	IP65	IP65

EXPANSION POWER MODULE

EPM32 / EPM08

- New INTEGRATED Power Distribution Module
  + 4 gigabytes datalogger
  + Dash controller
- GPS09 Module for automatic Lap Time and track position

EPM32

- 28 High Side Outputs
- 4 half Bridge Outputs

EPM08

- 8 High Side Outputs

Expansion Power Module

EPM is the power module you may connect through CAN to your AiM device as an expansion.

Available in two option:

- EPM08 featuring 8 power outputs
- EPM32 featuring 32 power outputs

NEW

	EPM32	EPM08
Input	14 fully configurable, max 500 Hz each: 8 analog/digital Pull up/down 4 digital inputs 2 speed input	6 fully configurable, max 500 Hz each Pull up/down 2 speed input
Power outputs	4 rated up to 20 A (high power) 12 rated up to 15 A (mid power) 12 rated up to 10 A (low power) 4 rated up to 35 A (Half Bridge) Protected for: over voltage, under voltage, over current, over temperature, short circuit Total max current: 120 A	1with series 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 , short circuit Total max current 100 A
Lin bus	1	1
CAN connectors	3	2
Inertial platform	3 axis ±5G accelerometer + 3 axis gyro + 3 axis magnetometer	3 axis ±5G accelerometer + 3 axis gyro + 3 axis magnetometer
Internal memory	4 GB	4 GB
Connectors	2 AMP connectors + 1 Amphenol Surlok connector	2 AMP connectors + 1 Amphenol Surlok connector
Body	Anodized aluminum	Anodized aluminum
Dimensions	223 x 94.6 x 49.5 mm	161 x 100.6 x 50.6 mm
Weight	740 g	370 g
Waterproof	IP65	IP65

RIO02
Input/Output
Expansion Module

The RIO02 Remote Input/Output Expansion Module is dedicated to push button management when the available inputs aren't enough. It features :

- 19 inputs, primarily dedicated to push button management. Easily configure momentary, two-position, and multi-status, with momentary controls for long and short push.
- 2 Low side , max 2A, Digital Outputs.

Digital inputs Configuration panel example

Example of installation:
all the pushbuttons and switches of the new Ariel Atom IV are managed by a **RIO02.**

CAN connections	1
Inputs	19 of which: 8 programmable: Switch to batt or switch to ground 11 switch to ground
Outputs	2 Low side Max 2 A
Body	Plastic
Dimensions	99.2 x 80 x 40.1 mm
Weight	120 g
Waterproof	IP65

Solo 2
Solo 2 DL

- Graphical display
- Automatic Lap time calculation based upon GPS technology
- Wide internal Track Database with more than 3,000 tracks
- Automatic track recognition at power on
- Freely configurable display
- 10 configurable RGB LEDs
- Freely selectable race Mode:
  Speed, Performance, open/closed circuit
- Internal 4 GB memory
- Rechargeable lithium battery
- Connectable to any ECU for getting and recording
  all ECU data (Solo2 DL only)
- Multiple configuration management (Solo2 DL only)
- Open/closed track creation

The most precise and easy way to get lap times

Solo 2 laptimer receives data from two satellites constellations: GPS and Glonass.
This is a huge step forward since it is unbelievably faster and more precise than the previous version and the lap times are calculated within a maximum gap not higher than 2/100 sec.
The screen can be backlighted in one of seven available colors.
Solo 2 can rely on a database of more than 4,000 tracks all over the world: as soon as it switches on, Solo 2 identifies its position, recognizes the starting line coordinates of the track and starts sampling lap times.
In case the track is not in the database, no problem: Solo 2 realizes it and switches to the autolearning mode, automatically understands the characteristics of the track and gives the lap time anyway.

Configurable RGB LEDs

Even the predictive lap time is much more reliable and the configurable RGB LEDs will give you a clear and fast indication of the comparison with your best lap.

Race Mode Selection

Solo 2 can manage two types of races:

- Speed races in a closed circuit
- Performance tests (0-100 km/h etc.)

In each of these configurations, Solo 2 gives the proper information during the test and powerful data to be reviewed immediately after each session.

Wi-Fi communication with the PC

Easy, fast Wi-Fi connection without connectors nor cables: the best way to configure your Solo 2, manage the track database and download the data to your PC.

Data recall on screen

At the end of your test, you can quickly review all the key information on your display.

Solo 2 DL
The Solo with ECU connection

More than 2,000 protocols for 1,000+ ECUs in the database, for easily connect your Solo 2 DL to your Engine Control Unit and get a lot of information with just one cable.
In case your ECU protocol is not in our database, no problem at all: an ECU Driver Builder is always available in **Race Studio 3** configuration software, and you will be able to create your own protocol.

Specific bar pads for motocross

Bar pads to fit handle bars with and without brace are available for immediate installation on any kind of motocross bike.

Coil RPM Input

Solo 2 DL features a digital input allowing to log RPM either from square wave signals (8-50 V each signals) or pulse signals (150-450 V ignition coil trigger – primary circuit).

SmartyCam connection

The perfect connection: get all the data from your ECU, merge them with the GPS information and transmit everything to SmartyCam, that will show them in graphical overlay on the video.

Open track creation

Solo 2 DL features a digital input allowing to log RPM either from square wave signals (8-50 V each signals) or pulse signals (150-450 V ignition coil trigger – primary circuit).

Multiple configurations management (Solo 2 DL only)

The perfect connection: get all the data from your ECU, merge them with the GPS information and transmit everything to SmartyCam, that will show them in graphical overlay in the video.

Technical specifications

Display	Graphical
Display resolution	238x99 pixels
Display pages	Up to 8 freely configurable
Backlight	7 configurable RGB colors
Shift lights/alarm LEDs	10 configurable RGB LEDs
Integrated track database	Yes
Inertial platform	Internal 3 axis ±5g acc. + 3 axis gyro + 3 axis magnetometer
Wi-Fi connection	Yes
GPS	10 Hz
External power	12V
Memory	4 GB
Battery type	Rechargeable lithium
Pushbuttons	Metallic
Dimensions	98.0x73.7x30.2
Weight	240 g
Waterproof	Battery included
Solo 2 DL	IP65
ECU connection	CAN, RS232 or K-Line to 2,000 + industry leading
Multiple configuration management	Yes

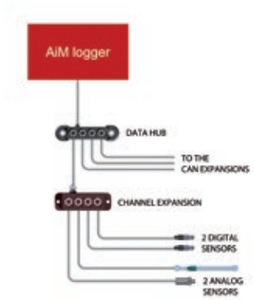
Channel Expansion Can Device

- 4 freely configurable analog (or two digital and two analog) channels
- CAN connection to AiM loggers and dashloggers
- Dimensions: 105x33x28.4mm
- Weight:170 g
- Waterproof: IP65

Enhancing your logger performance

This compact CAN device provides virtually endless data acquisition system expansion options.

Channel Expansion adds up to four freely configurable analog (or two digital and two analog) channels without occupying or modifying any of the existing system channels.
Thanks to the advanced CAN technology wiring is simplified from four cables to a single connection, thereby reducing possible and unnecessary points of failure.
Using a Data Hub it is also possible to connect as many Channel Expansion as needed to a master.



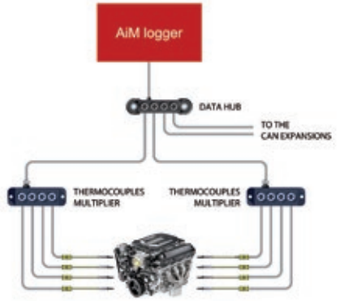
TC HUB THERMOCOUPLES MULTIPLIER

- CAN connection to AiM loggers and dashloggers
- Supports K type thermocouples
- Dimensions: 105x33x28.4mm
- Weight:170 g
- Waterproof: IP65

Keep all temperatures of your engine under control

With TC Hub four additional thermocouples can be connected via CAN to all AiM loggers.

Using more TC Hubs you can easily keep under control all your temperature sensors data, monitoring each single cylinder exhaust gas temperature, together with water, oil and head temperatures.
TC Hub is highly reliable, being its sampling frequency configurable up to 50 Hz per channel.
Its aluminum chassis makes it resistant and waterproof.



LCU-One
Lambda Controller

- Sampling A/F ratio and punctual Lambda values from 0.65 to 1.6
- Wide band Bosch LSU 4.9 probe included in the kit
- Dimensions: 105x33x28.4mm
- Weight:170 g
- Waterproof: IP65

Full control of your engine

LCU-One Lambda controllers allow you to perfectly tune the carburetion of your engine, significantly improving your car performances.
All LCU-One lambda controllers use a wide band Bosch LSU 4.9 probe for its capacity of saving the original calibration for all its life and for its duration: Bosch LSU 4.9 probe, in fact, has been designed to last for more than 100,000 km on a stock car.

High precision sampling

LCU-One can detect punctual 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 points out possible oxygen excess/lack in the carburetion, providing an essential information for gasoline, diesel or alternative fuel powered engines.

Three variants to cover all needs

LCU-One range is available in three different versions:

- LCU-One CAN: uses a CAN bus and is extremely easy to install
- LCU-One Analog: uses a serial line for programming an analog output proportional to lambda value

To be even more user-friendly, these two versions of LCU-One switch on/off together with the logger.

- LCU-One CAN + Analog, equipped with both CAN bus and analog output

Shift Light Module

- 10 configurable RGB LEDs
- CAN connection to AiM loggers and dashloggers
- Dimensions: 116x27x17mm
- Weight: 70 g
- Waterproof: IP65

Your shift lights where you wish

Ten completely configurable RGB LEDs to keep your engine under control.
You can easily set the LED color and the RPM threshold value that turns it ON, also the gear number.
Shift Light Module is CAN compatible with the following AiM systems:
EVO4S, EVO5, MXG Series, MXP Series, MXS Series.

You can set Shift Light Module as a Predictive Lap Timer as well: the LEDs bar will turn green if you are improving your on your best lap of the session and will turn red if you are getting worse.

Memory Module

- Max power consumption 50 mA
- Cable length 40 cm
- SD Card 4 GB included; it supports up to 128 GB
- Dimensions: 55.5x78.3x18 mm
- Weight: 103 g
- Waterproof: IP65

Massive data storage for AiM loggers

Memory Module is a small SD Card holder that can be connected via CAN bus to these AiM loggers: MXG 1.2, MXP, MXS 1.2, EVO4S, EVO5 in order to record the data during your tests. Its management is really simple: just connect the Module to your logger and data will be simultaneously saved both in the logger and on the SD Card (not included). No configuration is needed.

The SD card can be removed and replaced even during pit stops, while the car engine is still ON, making it extremely fast to get the data during endurance races or long tests, when the time at the paddock is so limited.
When the session is over, all you need to do is moving the SD card from the Module to your PC and download the data using **Race Studio 3.**
The Module features a front LED showing its recording/fw updating status.

Strada Logger

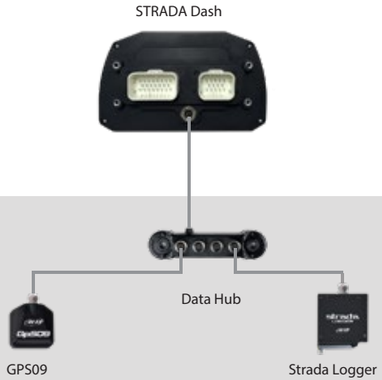
- Max power consumption 50 mA
- Cable length 20/40 cm
- Supports up to 32 GB
- Dimensions: 55.5 x 78.2 x 18 mm
- Weight: 103 g
- Waterproof: IP65

The logger module for Strada dashes

Strada Logger is a small memory module that lets you record and save all the data coming from the ECU.
The management is easy: once connected to your dash, Strada Logger start immediately to record when it needs to be done. It doesn't really require any configuration at all.
Strada Logger can gather till 32 GB of data, which means it can record about 2,000 hours of data (at 1 KHz).

From MX Strada to a full-working logger

Receiving and reading data while you are driving is not enough anymore?
Then it's time to step your game up with the brand new Strada Kit!
The kit will turn any MX Strada into a full-working logger, able to collect data ready to be analized on Race Studio 3 Analisys to make you improve your performance, understand whether there are problems or not on your vehicle and much much more.
Reliable and easy to install, Strada Kit is just what you need to turn from an above average fast driver into a real race one!



GPS09/GPS09 ROOF

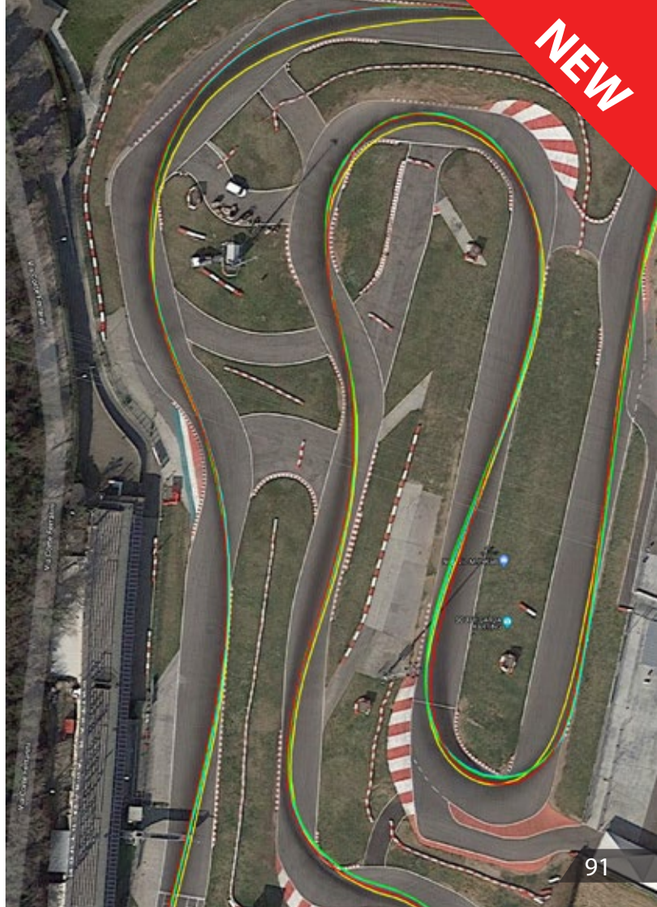
- Works with 4 satellite systems
- Less than 0.5 meters (1.6 feet)
- The frequency has been improved at 25 Hz
- Fast signal locking
- Signal continuity guarantee

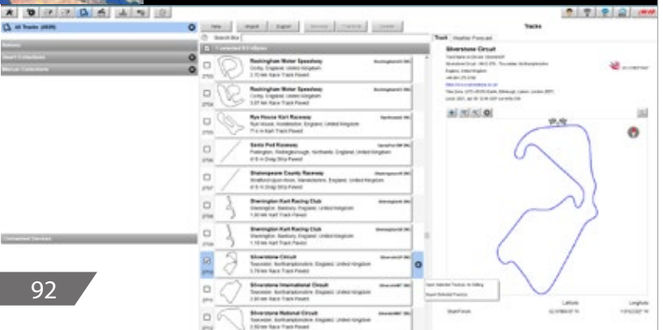
Another revolution has begun

GPS technology represented a true revolution in racing data acquisition.
Now another revolution has begun, thanks to GPS09 Module and **Race Studio 3** software.
As you start a track session you start sampling lap and split times as well as speed, position and acceleration, all the information you need for engine tuning as well as for improving your driving technique.

The benefits are huge:

- Less than 0.5 meters (1.6 feet) average tolerance, which means absolute precision in determining the vehicle position.
- Satellite signal is locked very rapidly.
- The frequency has been improved from 10 to 25 hz.
- A few seconds after switch-on GPS09 is ready to operate.
- No risk of missing the signal anymore, as - in case of 'noise' or interferences on a system - the other systems guarantee signal continuity.





The greatest reliability and precision ever

GPS09 is more precise: while GPS08 included GPS satellite signal and Global Navigation Satellite System (Glonass) signal, with GPS09 AiM added signals from **BeiDou** and **Galileo** satellite systems.
GPS09 guarantees precision and reliability simply not comparable with the old generation of AiM GPS Modules.

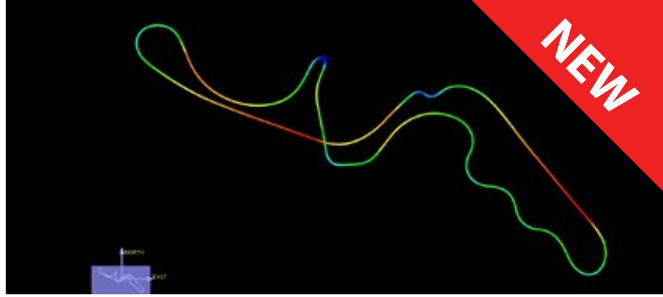
With your track included in AiM database, GPS09 does it all by itself

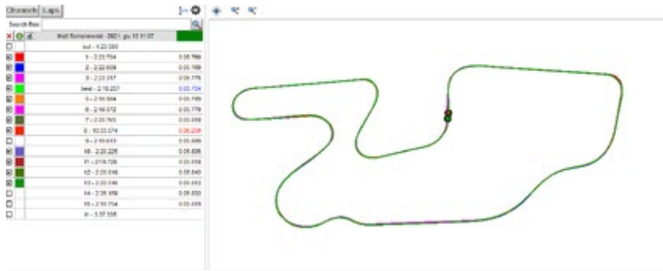
As soon as GPS09 switches-on its position is detected and - if your track is included in Race Studio 3 database -it starts sampling lap times. In fact, the software stores the start/finish line coordinates (plus map, contact info and logo) of more than four thousand tracks, sorted by nation, circuit and surface type.
You can create your own collections, add/remove tracks as you wish. Just load your collection to AiM systems and GPS09 will be ready to operate. Should your home track be missing, you can easily add it to your tracklist.

There is a world beyond lap times

Don't settle for less than you deserve.
To get better you have to know all details of your performance.
GPS09 samples more than ten times per second position, speed and lateral/in-line acceleration at any point of the track:
all data needed for a precise evaluation of your vehicle behaviour, which is the necessary step to try to improve your performance and achieve your goals.
Thanks to GPS09 even the predictive lap time will be much more reliable: in any moment of your race, you will know your time gap vs. your best lap with absolute precision.

GPS09 is also available in "Roof" version, specifically designed for easy installation on closed cars.





GS-Dash

- Display resolution: 268x128 pixels
- Backlight: 7 configurable RGB colors
- Ambient light sensor
  Five RGB LED configurable shift lights
- Four configurable alarm LEDs
- Fully configurable display pages
- Aluminum Body
- Metallic pushbuttons
- Dimensions: 128 x 82 x 22 mm
- Weight: 380 g

The Compact Display for EVO4S and EVO5

GS-Dash has been designed to show data sampled by the new generation of AiM loggers, EVO4S and EVO5.
With this compact but with wide graphical display you can visualize all data coming from your vehicle's ECU, from the accelerometers and from the GPS, as well as from your custom sensors.

Easy and immediate readability

To maximise readability of data, you need plenty of room.
That is why GS-Dash features a wide 268x128 pixel graphical display.

EVO5

EVO4S

Fully configurable shift lights and alarm LEDs

GS-Dash features five individually configurable RGB LED shift lights:
you will choose color and value thresholds for their activation.
In addition to this, they can also be configured to show your best lap/split time or monitor RPM level. Alarm LEDs are configurable as well, in order to turn them on/off depending on the values you selected and their thresholds.

All the data you wish, with your preferred layout

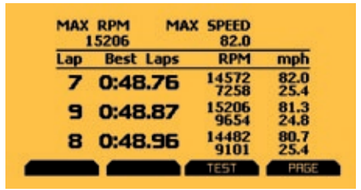
GS-Dash swaps among pages showing lap times and data in a 100% customizable way:
just choose your data and create your pages displaying up to 4 fields each.
The "RPM and Lap Time" page layout is also available to display RPM Graph, Lap Time and two channels of your choice.

Backlight available in seven colors

The screen can be backlighted in one of the seven available colors.
The incorporated light sensor makes brightness and contrast ideal in all light conditions.

Recall your session highlights

A key-data summary is available at the end of each session: you can also see a list of all the laps of the session, with their times, min/max speed and min/max RPMs.

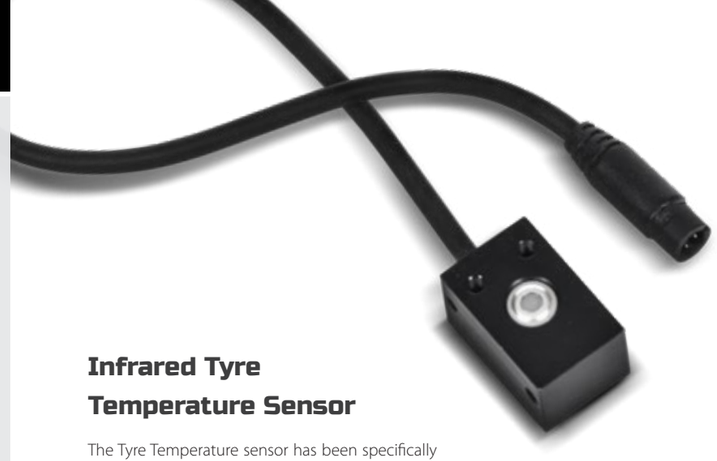


Technical specifications

Display resolution	268x128 pixels
Backlight	7 configurable RGB colors
Ambient Light sensor	Included
Shift Lights	5 RGB configurable
Alarm LEDs	4 configurable
Display pages	Fully configurable
Body	Anodized Aluminum
Pushbuttons	Metallic
Dimensions	127.8x82x22.2mm
Weight	380 g
Waterproof	IP67

Infrared Tyre Temperature Sensor

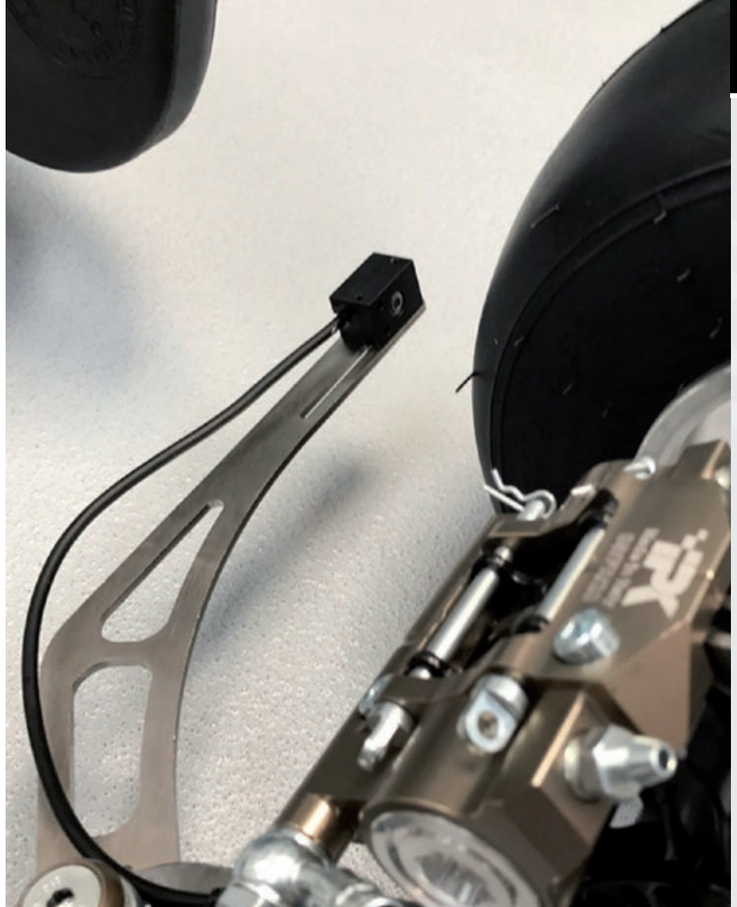
- Display resolution: 268 x 128 pixels
- Backlight: 7 configurable RGB colors
- Ambient light sensor
  Five RGB LED configurable shift lights
- Four configurable alarm LEDs
- Fully configurable display pages



Infrared Tyre Temperature Sensor

The Tyre Temperature sensor has been specifically designed to measure the surface temperature of tyres, providing important info for chassis tuning, tyre exploitation, and driver behaviour.

It can be connected to MX series or EVO series analog inputs directly or via Channel Expansion. The sensor, with a 35° Field of View, measures temperatures between -20°C and 120°C and provides a 0-5V output signal.



Output signal	0-5V
Field of measure	35°
Working range	-20/120°C
Sensor electrical range	820 mV/-20°C
	3230 mV/120°C
Sensor dimensions	26.6x17.2 mm
Sensor cable lenght	250 mm
Waterproof	IP65

PIN	FUNCTION
1	Analog signal
2	GND
3	Not connected
4	+Vreference

Pressure Sensor

- Accuracy <+/- 0.5%
- Output signal 0.5V to 4.5 V
- Temperature working range from -20° to 135°C
- Compensated temperature range from -10°C to 125°C
- Overrange pressure 1.5x rated pressure
- Burst pressure 3x rated pressure
- Sealing IP66
- Supply 8-16V
- Consumption <10 mA
- Housing 316 stainless steel
- Sensor thread M10x1 or 1/8" NPT
- Cable length 500 mm

A full range of reliable sensors

AIM offers a full range of sensors specifically designed and tested to interface our datalogger and able to monitor all vital parameters of the vehicle.
AIM sensors are developed to resist to the harsh motorsport environment in terms of vibration and to provide reliable data.
Engine temperature, water/oil, and tire temperature can be constantly monitored as well as oil pressure and brakes fluid pressure.
Brakes pressure can be combined with longitudinal G force analysis for determining effectiveness of braking and driver ability to use it.

New AIM pressure transducers have been developed to be used in motorsport, key features are:

- SMALL SIZE HEX19 OR 3/4"
- HIGH ACCURACY
- ROBUSTNESS

AIM pressure transducers are essential to monitor engine and chassis parameters like:

- ENGINE OIL PRESSURE
- BRAKES FLUID PRESSURE

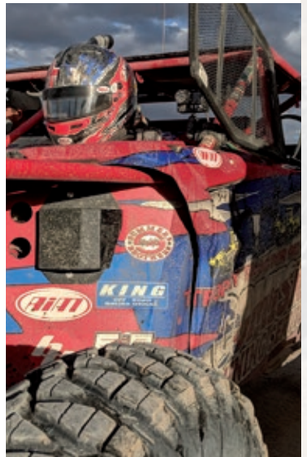
AIM pressure transducers are available with different process connection:

- M10X1 MALE
- 1/8 NPT MALE
- 3/8 INCH 24 UNF DASH 3

AIM pressure transducers are available in many ranges with metric [bar] and imperial [PSI] standards:

BAR	PSI
0-5	0-15
0-10	0-50
0-100	0-150
0-160	0-300
0-200	0-2000

Supply	8-16V
Output signal	0.5V to 4.5 V
Consumption	<10 mA
Temperature working range	from -20° to 135°C
Compensated temperature range	-10°C to 125°C
Accuracy	<+/- 0.5% FS (CLNH combined non-linearity and hysteresis)
Overrange pressure	1.5x rated pressure
Burst pressure	3x rated pressure
Sealing	IP66
Housing	316 stainless steel
Weight	30 g
Cable length	500 mm



UTV
systems

AiM has created a line of products specifically designed for utility task vehicles due to the perpetually growing popularity of off-road recreational and sports activities. The different and extreme conditions of use of UTVs have led AiM to search for products that can provide optimal solutions in those different environments and conditions, in order to improve vehicle performance and safety.

MX UTV

- Integrated GPS
- Wide display with configurable multicolor backlight
- Graphical display resolution
- Ambient light sensor
- 2 freely configurable RGB Alarm LEDs
- 5 freely configurable RGB ShiftLight LEDs
- CAN connection
- ECU connection
- 4 GB internal memory
- 1 analog imputs
- Glass fiber reinforced nylon
- Metallic pushbuttons
- Rechargeable Lithium Ions Battery
- Wi-Fi connection
- Single point sensor
- Waterproof

The gauge for UTV vehicle

AiM has specifically developed the MX UTV for all those wild off-road racers whom crave for adrenalin and freedom but still need data to get the best out of their vehicles.
Speed, RPM, laps and the belt temperature, which is beyond doubs mainly important to avoid dangerous transmission breaks, are all shown through the wide LCD display which also features alarm LEDs and an ambient light sensor that keeps the backlight at optimum brightness levels.
Following the "User-Friendly" philosophy, MX UTV let its users to choose the ECU connection directly from the device without the need to configure it via our software Race Studio 3: AiM MX UTV is completely plug-and-play.
Thanks to the secure 802.11 Wi-Fi connection, download data has never been this easy: no need to move your PC close to the vehicle anymore, you can do it from your van up to 50 meters away. Such a perfect option while you're off-roading.

Dedicated design

MX UTV is a gauge designed for being installed on an UTV vehicle.
It samples and shows:

- CHANNELS COMING FROM THE VEHICLE ECU
- ONE TEMPERATURE VALUE THAT CAN BE BELT OR, ACCORDING TO THE ECU OF YOUR VEHICLE, OIL TEMPERATURE OR OIL PRESSURE

Lap time, with the precision of 1/100 sec and all parameters coming from GPS and Glonass constellations: speed, position, lateral acceleration and time of the day.

GPS receiver

The GPS receiver has been tuned for our sport and can thereby stand all lateral and longitudinal accelerations, direction changes and vibrations without problems, always giving a perfect result ten times per second (10 Hz).
MX UTV uses both GPS and Glonass data to compute lap times.
In case the track in which you are racing is included in the MX UTV database, it automatically recognizes it, gets the start/finish line and calculates lap times with high precision.
All these data are stored in a huge 4 GB internal memory, that can record your data for thousands of hours.
You can download the data recorded on your PC using Wi-Fi.

A smart display

The wide LCD display has a freely configurable RGB backlight and a light sensor that automatically switches on the backlight with low light conditions.
The two RGB alarm LEDs can be switched on with seven different colours, different blinking patterns and custom temperatures thresholds.
Five configurable shift lights help you choosing the best up-shift moment. A very helpful alternative is to use them to indicate the real-time gap between the current lap and the best lap of the session.
You may analyse the data with **RACE STUDIO ANALYSIS 3,** the widely approved data software you can freely download from our website www aim-sportline.com.

Display resolution	268x128 pixels
Backlight	7 configurable RGB colours
Ambient Light sensor	Yes
ShiftLights	5 freely configurable RGB LED
Alarms LEDs	2 freely configurable RGB LED
CAN connection	Yes
ECU connection	Yes
GPS	Integrated 10Hz GPS+Glonass
Analog Inputs	1
Wi-Fi connection	Yes
Internal memory	4 GB
Body	Glass fiber reinforced Nylon
Pushbuttons	Metallic
Connectors	Binder connectors
Dimensions	137x88.4x31.9 mm
Weight	330 g
Waterproof	IP65

IBTS
Infrared Belt Temperature System

- RGB LED Alert
- The LED starts blinking red when temperature exceeds
- Anti-Glare TFT Display, sunlight readable
- Vibration proof
- Aluminum Body
- Metallic pushbutton
- Single point sensor
- Dimensions: Ø 70 x 30,3 mm
- Weight: 150 g
- Waterproof IP65

You can't do without it anymore

Forget about breakages, stop to be worried and just enjoy the race: that's our gauge's purpose, which makes it the most "must have" device for your UTV activities!

The kit is composed by a gauge, a sensor and the power cable, the Infrared Belt Temperature System is the AiM device that shows an avarage temperature information of a specific controlled area.

What the Gauge shows

The two most important information shown by the Gauge are:

- The temperature information from the Infrared Single point temperature sensor, recorded once every 10 seconds, saving the maximum measured temperature in that period of time
- The external supply voltage

Temperature. No more fear

It is possible to set two different thresholds for the temperature: a Warning level and an Alarm level.

Normally shown in white, the Gauge will dispaly the temperature value in yellow when it rises above the Warning level and a message will appear at the top of the screen and a red LED will start blinking.
When the temperature rises above the Alarm level, reaching that critical point when the belt could melt and break due to the highest temperature, the Gauge will display the value in red, a message will appear at the top of the screen and a red LED will start blinking.
This way the driver will always know when it's time to cool down their vehicles and so saving the essential parts.

Recall your previous test

From the Online page it is possible to access to the Data Recall section, for revisiting the data of the last 25 tests.

Display resolution	160x128 pixels
Display	1.8", Anti-Glare, Sunlight Readable
Alarm LEDs	RGB LED
Body	Anodized Aluminum
Pushbuttons	Metallic
Dimensions	Ø 70 x 30.3 mm
Weight	150 g
Waterproof	IP65

Karting
systems

Just like many of the greatest drivers, AiM started "karting" when was a young company and quickly become the undisputed leader in Karting accessories.
Dedicated accessories for Karting are constantly developed to obtain the best products to help driver continuosly improve his results.

MyChron5S

- Integrated GPS
- Wide display with configurable multicolor backlight
- Graphical display resolution
- Completely configurable pages
- Calculated Gear Number
- 2 freely configurable RGB Alarm LEDs
- 5 freely configurable RGB ShiftLight LEDs
- Glass fiber reinforced nylon
- Metallic pushbuttons
- Rechargeable Lithium Ions Battery
- Wi-Fi connection
- Compatible with MyChron4 add-ons
- Waterproof IP65

The most precise and reliable GPS ever

MyChron5S integrated GPS samples lap times as well as speed, position on track and acceleration... with a reliability simply not comparable to traditional tools and even with previous GPS systems.
The system adds to the GPS satellites signal the Global Navigation Satellite (Glonass) system signal: an average of almost twenty satellites working in conjunction, MyChron5S GPS guarantees absolute precision.
MyChron5S GPS can recognize the finish line coordinates of hundreds of kart tracks all over the world. Opening **Race Studio 3** software you will see the huge list of tracks included in the AiM database: you will be able to create your own collection, adding/removing tracks.
So, immediately after switch-on, MyChron5S GPS will determine its position, identify the track and start loading start/finish line coordinates and start sampling lap, predictive and split times.

Completely configurable pages

Designate as many pages as you wish, showing graphic bars or just digits, via software or directly on your system.
In case your kart is a shifter kart, you can decide to show the gear number, automatically calculated keeping the gear for at least three second while you are driving.

Ambient Light Sensor

MyChron5S provides optimum viewing in several lighting conditions:
the display brightness is automatically adjusted according to the environment light.

MyChron5S 2T

Like its predecessor, also MyChron5S 2T gives the chance to control two engine temperatures instead of one, coming from thermocouples or thermoresistors.

ShiftLights and Alarm LEDs

Five RGB shift lights can be configured for each gear, choosing LED color and RPM threshold values which will turn them on/off. They also allow RPM monitoring in a glance. All alarms are managed in a very flexible way: you choose the situation that generates the alarm, the LED behavior (blinking frequency and color) when the alarm appears and the conditions for its switch-off.

A robust housing with wider display

The new Nylon chassis with metallic pushbuttons guarantees even more resistance to shocks and water.
A great readability is ensured by the anti-scratch non-reflecting polycarbonate screen and the wider display.

Rechargeable Lithium Battery

No problems with traditional batteries anymore: MyChron5S is powered by a dedicated rechargeable - and removable - lithium battery.
It is long-lasting (about 10 hours duration) and easy to recharge, placed on its magnetic basement connected to the power adapter.
The usual external power connection is also available.

Wi-Fi connection

Download your data to your PC, look at the OnLine measures, upgrade your firmware and then transmit parameters using Wi-Fi connection.

LCU-One

MyChron Expansion

SmartyCam 3 SPORT

Compatible with MyChron4 add-ons

Adding new modules you will get all the additional information you need:

LCU-One
Perfectly tuning your engine carburetion.

MyChron Expansion
The channel multiplier that permits to check when you brake and accelerate, as well as Power Valve behaviour.

SmartyCam 3
For professional videos with real-time data overlayed.

Technical specifications

GPS iintegrated	10 Hz GPS
RPM	Up to 25,000 RPM
Temperature	Thermocouple/ Thermoresistence
Lap time	GPS based (included)
	Optical or Magnetic receiver (optional)
Inertial Platform	For steering wheel position (included)
Wi-Fi connection to PC	Yes
Memory	4 GB - more than 3.000 hours of continuous logging
Display resolution	268x128 pixels
Backlight	Multicolor, freely configurable
Alarm	2 freely configurable RGB LEDs
ShiftLights	5 freely configurable RGB LEDs
Battery	Rechargeable 3 A Lithium Ion
Battery duration	Up to 10 hours
Battery charger	Included
Body	Glass fiber reinforced nylon
Dimensions	137x88.4x29mm
Weight	390 g battery included
Analysis software	Freely downloadable Race Studio 3

MyChron Expansion

- Sampling frequency 10Hz
- Dimensions 127x24x33 mm
- Weight 194 g

AIM MyChron Expansion channel multiplier drammatically improves MyChron5S and MyChron5S 2T (and also MyChron5, MyChron4 and MyChron4 2T) performance, thanks to four additional channels and a further CAN bus connector.
Through this last connector the systems can be connected to LCU-One Lambda controller and SmartyCam (and to GPS and Data key for MyChron4 systems).

Thanks to its specific wirings, MyChron Expansion powers the systems and their peripherals with an external dedicated battery, avoiding internal battery consumption.
MyChron Expansion features 4 inputs to connect the systems to an equal number of additional channels.

All channels are extremely easily configurable as analog through the system menu to sample data coming from:

- Exhaust gas valve position sensor (very important to understand at which RPM value the exhaust port opens)
- Wheel speed sensor: the first input on the left can be configured also as digital input
- No contact brake pedal position sensor
- No contact throttle pedal position sensor (to know if and when to accelerate)
- Brake pressure sensor
- Water temperature or cylinder head temperature (PT100 thermo-resistor only)
- Steering angle potentiometer (in order to highlight over/under steering situation
- Brake pedal potentiometer
- Throttle pedal potentiometer

MyChron Expansion represents a complete, value-for-money instrument for professional kart analysis.

Warning: MyChron Expansion DOES NOT support gear calculation.

Tyre Temperature Sensor Kit

- Integrated GPS
- Wide display with configurable multicolor backlight
- Graphical display resolution
- Completely configurable pages
- Calculated Gear Number
- 2 freely configurable RGB Alarm LEDs
- 5 freely configurable RGB ShiftLight LEDs
- Glass fiber reinforced nylon
- Metallic pushbuttons
- Rechargeable Lithium Ions Battery
- Wi-Fi connection
- Compatible with MyChron4 add-ons
- Waterproof IP65

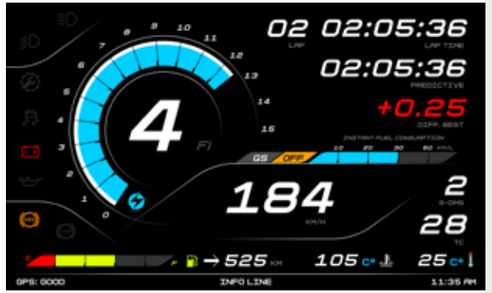
Tyre Temperature Sensor Kit for karts

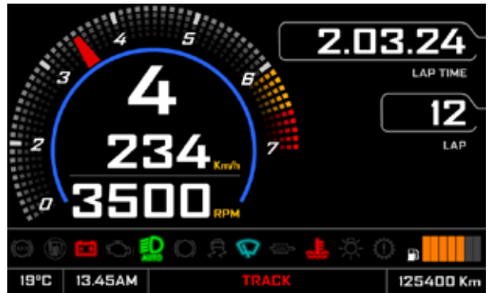
Five RGB shift lights can be configured for each gear, choosing LED color and RPM threshold values which will turn them on/off. They also allow RPM monitoring in a glance. All alarms are managed in a very flexible way: you choose the situation that generates the alarm, the LED behavior (blinking frequency and color) when the alarm appears and the conditions for its switch-off.

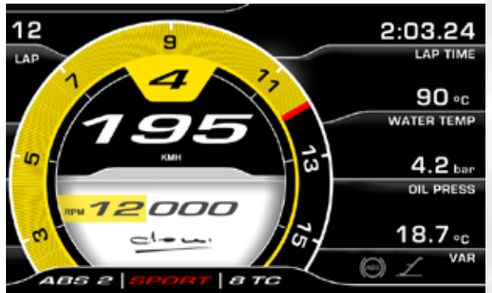
Temperature Controller, hosting up to 4 IR sensors.
The sensor, with a 35° Field of View, measures temperatures between -20°C and 120°C and provides a 0-5V output signal.





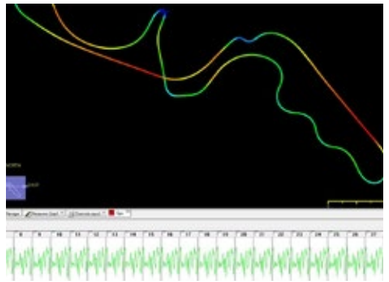
OEM
program

As a world leader in motorsport racing application, AiM is proud to be an integral part of shared projects with the most important companies in the automotive and motorsport sectors.
AiM is choosen by its partners for one reason: it brings value to the projects which it is involved in, thanks to its technical know-how recognized worldwide since over thirty years.
AiM means reliability, fairness and very high technological value, for OEM projects too, and much more.








A constant, professional after market assistance

All our systems are guaranteed for years, until the electronic components are available on the marketplace. This means that - whenever a system is down for reasons not due to incorrect use by the user - it will be fixed for free.
Even if bought five-six years before.

Any doubt, call or email us: all around the world you will find an AiM technician ready to assist, for all the time needed and with no additional costs. In case of bugs (which sometimes occurs; racing conditions are so terribly different that something can be missed), you will be put in touch with the engineers who developed the system, that will listen to you to determine what did not work and the problem will be analysed and solved in a short time. Our technicians are even on track to help you correctly using our systems, changing configurations, to suggest solutions or just to replace a broken sensor.
Find your local dealer browsing the huge list of AiM partners all over the world.
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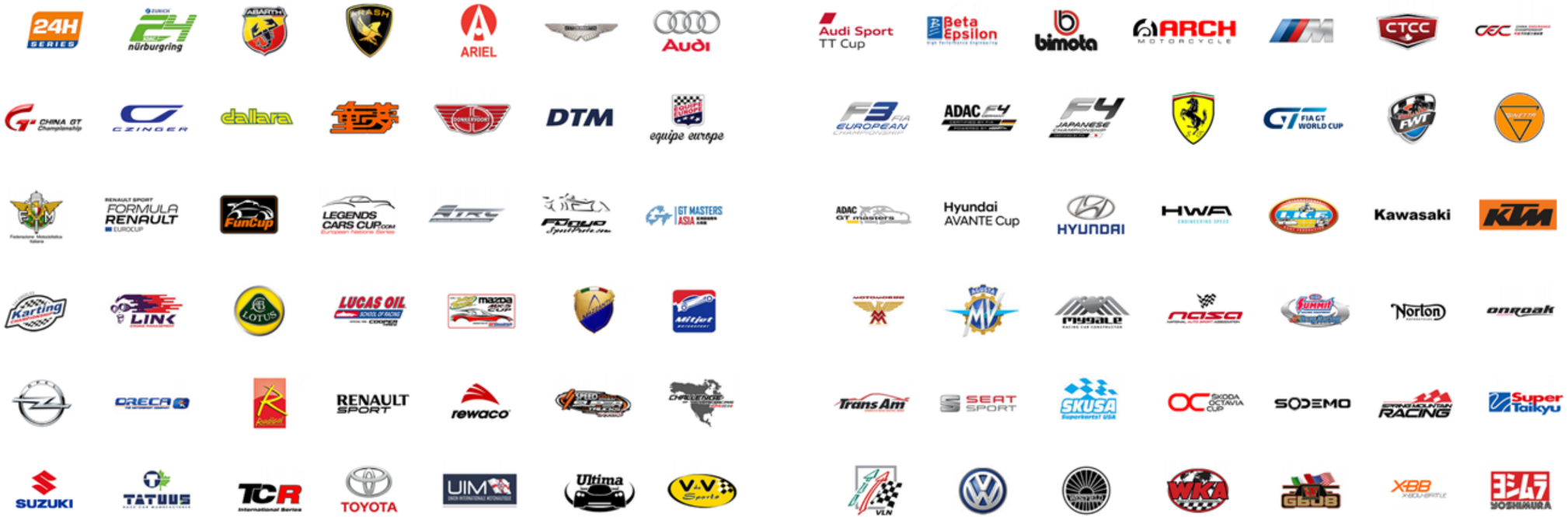
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