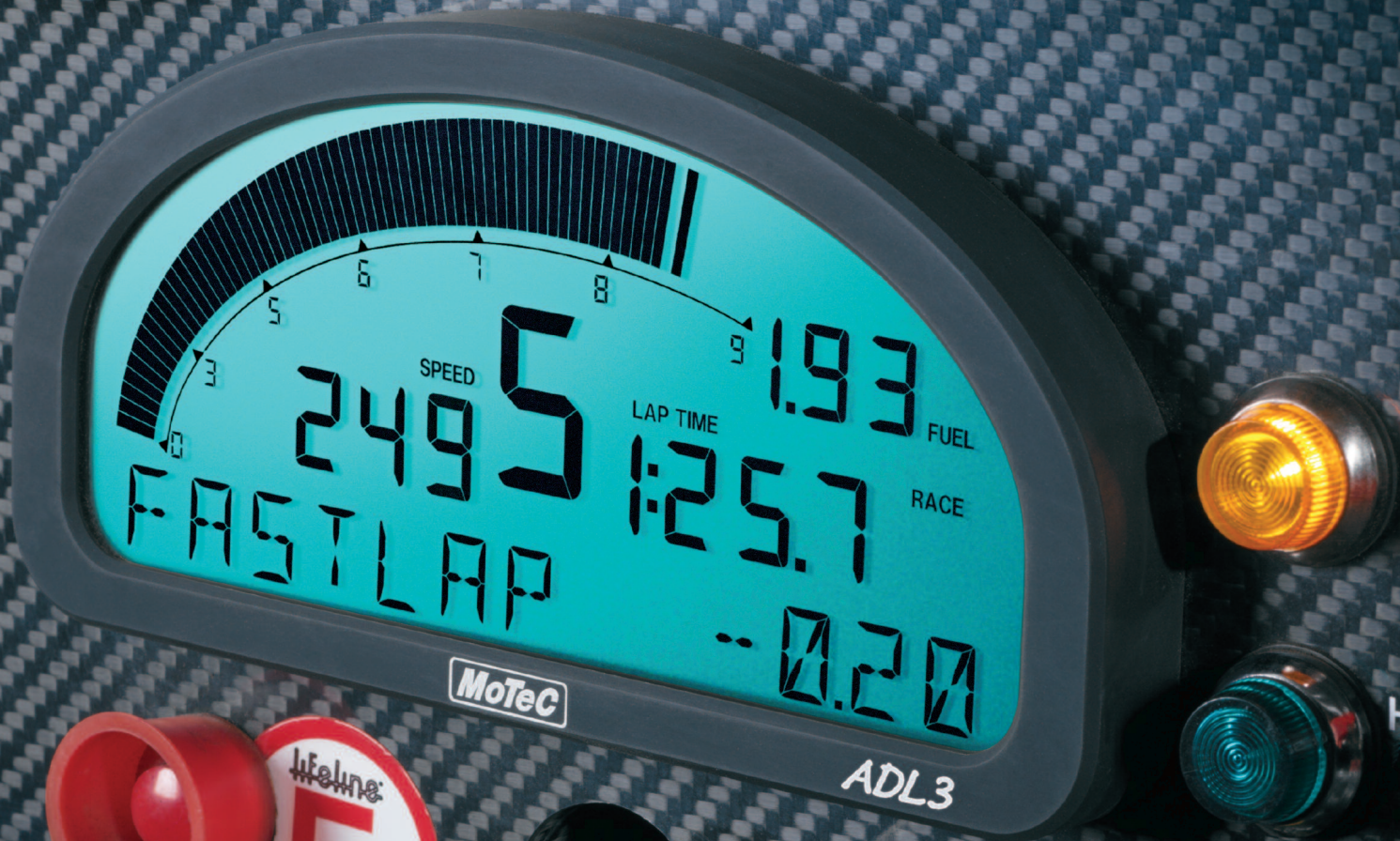


ADL3 Advanced Dash Logger



PAGE



Race smart.

THE COMPANY



MoTeC was founded in 1987 with the aim of providing world class products, superior customer service and the most advanced technology available.

A strong commitment to delivering the best possible solutions, state-of-the-art hardware and user friendly software has earned **MoTeC** international recognition as a leader in engine management and data acquisition systems.

As automotive technology continues to evolve, **MoTeC** reinforces its dedication to research and development with an innovative range of products and sophisticated software, all backed by an outstanding package of total customer support and an exceptional two year product warranty.

THE MoTeC DIFFERENCE

The **MoTeC** brand represents smart engineering, dedicated research and development and an uncompromising approach to quality. **MoTeC** insists on using first class components and superior manufacturing processes to ensure the highest levels of performance and reliability.

ENVIRONMENTAL PROTECTION

MoTeC Dash Loggers are built tough to withstand the extreme conditions of a diverse range of applications worldwide; from circuit racing and oval tracks to harsh deserts and rugged rally stages; from Top Fuel drags and high speed boats to the ultimate in sports cars and bikes, even industrial environments.

Each ADL3 is robotically assembled and dipped in liquid silicone to fully encapsulate the components and circuit board. This military grade coating protects the surface mounted technology from damaging environmental contaminants such as moisture and dust, and improves resistance to vibration.

The 79 pin Autosport connector with gold plated contacts enhances connection reliability while a robust aluminium enclosure provides further protection and a strong mounting solution.

FLEXIBILITY

The ADL3 adapts to virtually any application, enabling users to tailor a system to their specific needs. All aspects of the Dash Logger are fully configurable, including sensor types, the allocation of sensors to inputs, channel selection, logging speeds, warning alarms and the control of auxiliary devices such as pumps, valves and solenoids.

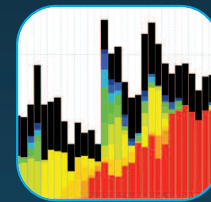
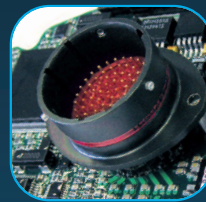
The ADL3 can be connected to any **MoTeC** ECU, as well as many other engine management systems.

DATA ACQUISITION

In today's fiercely competitive motorsport environment, data acquisition systems have become one of the most powerful tools to success. By recording and analysing information about temperature, speed, acceleration, strain and movement, users can gain valuable insights into performance and reliability, resulting in more efficient testing and tuning and greater predictability on race day.

This information can also be used to determine pit stop strategy, to assess and compare driver technique and to ensure maintenance schedules are met. For immediate feedback, data can be monitored live in the pits via telemetry and in the vehicle's cockpit on a **MoTeC** Dash Logger.

MoTeC Loggers are renowned for outstanding accuracy, reliability and versatility. They have been race proven on two wheels and four, on land and on water, from 4 second quarter miles to 24 hour endurance events.



ALL-IN-ONE DISPLAY, LOGGER & CONTROLLER

Separate products are often required to perform logging, controlling and display functions. **MoTeC's** ADL3, however, delivers seamless integration of all three. The one compact unit provides a complete solution, reducing space, weight and installation requirements.

EXPANSION CAPABILITIES

An optional 52 I/O upgrade may be enabled in the field to give ADL3 users immediate access to greater input and output capability.

The Dash Logger can also connect to two high resolution VIM/SVIM input modules, each providing 24 channels at up to 15 bit resolution - synchronously in the case of the SVIM - plus two E888 or E816 expansion devices offering up to 40 extra inputs and 16 extra outputs. Additional channels from other devices can be added via CAN and RS232.

Two independent, high speed CAN buses allow users to configure different speed buses into the ADL3 or spread high CAN loads.

SOFTWARE & UPDATES INCLUDED

The **ADL3 Dash Manager** operating software is included and updates are available via the website at no cost, giving users access to the latest features for the life of their equipment.

MoTeC's **i2 Standard** Data Analysis software is also included at no charge, while a further investment is required for **i2 Pro** and its associated Feature Licences.

ADL3 ADVANCED DASH LOGGER

The ADL3 is the latest evolution of **MoTeC's** internationally acclaimed Advanced Dash Logger - a sophisticated display, fully programmable data logger and powerful controlling device in the one lightweight unit.

It accommodates up to 500 channels derived from a mixture of analogue, digital, RS232 serial, CAN data and calculated channels.

CHANNELS MAY INCLUDE:

- Infrared tyre temperatures
- Suspension positions
- Suspension forces
- Ride heights
- Vehicle yaw
- Hydraulic pressures
- Fuel flow and fuel used
- Driveshaft speed
- Throttle position
- Exhaust gas temperatures
- Boost pressure
- Brake rotor temperatures
- Damper velocities
- Chassis strain
- G-forces
- Tyre slip angle
- Fuel and oil pressures
- Wheel speeds
- Engine RPM
- Steered angle
- Lambda
- Air temperature

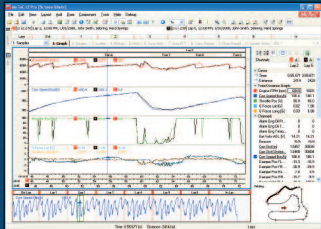
The ADL3 directly supports up to 32 analogue inputs plus 12 digital/speed inputs and 8 auxiliary outputs.

ADVANCED MATHS

Complex, user programmable maths calculations can be performed internally within the ADL3 for live evaluation. The formulas can include relational and Boolean operators, functions and constants, and can be used to define conditions. Up to 3000 instructions are available, with common expressions using around 15 to 40 instructions.

DATA LOGGING

Readings from analogue, digital, serial, CAN or calculated channels are stored in the ADL3 for download and analysis using **MoTeC's i2** software.



Channels can be selected independently and logged at rates up to 1000 samples per second. The required sample rate depends on the channel; for instance, engine temp doesn't need to be logged at the same rate as damper

position, allowing users to maximise the memory available without compromising the quality of the data being logged.

MoTeC's ADL3 uses non-volatile flash memory which can operate in stack or circular buffer mode, in accordance with user defined start and stop parameters.

The standard 16 MB of logging memory can be upgraded to 250 MB in the field through a convenient password system. This data is quickly retrieved via Ethernet at a speed of approximately 3.2 MB/second. No special components are required - readily available, off the shelf cables can be used.

DISPLAY

The ADL3's high contrast, reflective LCD screen has been custom designed for easy viewing in direct sun and artificial light, with an optional

adjustable backlight for maximum visibility in low light or at night time. High temperature tolerance ensures consistent reliability in all conditions.

The display has three programmable modes which operate independently of each other; Practice, Warm Up and Race. This allows relevant details to be shown to the driver at the appropriate time without unnecessary on-screen clutter.

The 70 segment curved bar graph can be configured to display any channel, with optional peak hold and shift markers. Each numerical item is programmable to show any value and can be overridden by user defined conditions.

Thirteen alphanumeric digits along the bottom of the screen can be used to display channel values, messages and warning alarms. There are 20 text lines available, which can be scrolled using an external button, plus four programmable overrides.

Lap times can be displayed when the Dash Logger is used in conjunction with a **MoTeC** Lap Beacon, GPS or driver activated switch.



SPECIAL FUNCTIONS

The ADL3 can calculate and display additional information including: Lap Time Gain/Loss, Lap Number, Minimum Corner Speed, Maximum Straight Speed, Fuel Used, Fuel Remaining, Laps Remaining, Trip Distance and Odometer. It also features a sophisticated engine log and tell-tale system.

WARNING ALARMS

Alarms are extremely beneficial in alerting users to potential concerns with the vehicle. They can be displayed on screen as a visible warning for the driver and also stored in the logging memory.

An alarm can be set for any analogue, digital, serial, CAN or calculated channel. Limits are fully programmable and may include up to six conditions to ensure that they are only activated at the correct time.

When an alarm condition has been detected, a message can be shown on the display and an auxiliary output activated. These outputs may be used for warning lights or the control of other devices. The alarms remain active until they are either acknowledged by activating a switch or removed automatically following a user definable period of time.



OUTPUTS

The ADL3's auxiliary outputs can be configured to operate in different modes to control a variety of devices, i.e. on/off, frequency, duty cycle or a combination of duty cycle and frequency. Users may wish to program these outputs to activate shift lights, thermo fans, oil and fuel pumps, nitrous injection, automatic timers and devices requiring PID control.

SENSOR CONFIGURATION

Each input channel on the ADL3 can be configured with the sensor type and calibration for the appropriate sensor. Common sensor calibration data is incorporated in the **ADL3 Dash Manager** software to simply select and assign to a channel. For other sensors, a custom calibration can be created and saved for use in subsequent installations.

While **MoTeC** provides a wide range of sensors and accessories, this flexibility ensures complete freedom of choice.

COMMUNICATION

2 x CAN (CONTROLLER AREA NETWORK)

CAN is a high speed communication standard, operating at speeds of up to 1 Mbit. It allows many devices to be connected by a common bus for the sharing of information as part of a larger system. CAN devices include engine management systems, sensors and multi-channel input/output modules.

The ADL3 has two independent CAN buses that enable interconnectivity with other devices at two different speeds. This is useful for integrating **MoTeC** equipment with OEM systems and third party electronics. It also allows those with extensive CAN demands to spread the load over two buses for more manageable data communication.

SERIAL

The RS232 serial port is programmable up to 115200 baud and can be used as both a telemetry data output port and a serial data input port.

As a telemetry port, devices such as GSM/satellite modems and radio modems can be used to facilitate remote connection. As a serial data input port, serial communications devices - including engine management systems (**MoTeC** and other), and GPS systems - can be connected for display and logging purposes. Information may be simultaneously received from a device and transmitted to telemetry.

ADL3 DASH MANAGER SOFTWARE

ADL3 Dash Manager is used to configure the ADL3 and to download the logged data. Display preferences, data logging settings, and inputs and outputs are stored in a Configuration File which can be modified offline as required and later resent to the ADL3. Conditions, tables, timers, alarms and overrides can all be created to activate outputs, warnings and displays.

User friendly online help is integrated throughout the software, allowing customers to familiarise themselves quickly without requiring advanced levels of computer knowledge or intense training.

i2 SOFTWARE



MoTeC's groundbreaking **i2** data analysis software allows users to comprehensively analyse and manage their logged data once it has been downloaded from the ADL3. It offers a state of the art user interface and an extensive package of advanced analysis tools.

There are two levels of functionality - **i2 Pro** and **i2 Standard**. **i2 Pro** requires the *Pro Analysis* ADL3 upgrade while the **Standard** version is free for all users.

NEW FEATURE LICENCES

Customers can now purchase a number of software Licences to activate additional **i2** features on one physical computer. Licenced features include: analysis of non-**i2 Pro** log files in **i2 Pro** (e.g. **i2 Standard** files, or log files from a different brand of logger), and the manipulation of log files via an API (Application Programming Interface).



COMPLETE CUSTOMISATION

The increasing diversity of **MoTeC** data customers in recent years has prompted a need for software that easily adapts to individual preferences. **i2's** unprecedented level of customisation allows users, both professional and amateur, to tailor data management tools to suit their specific requirements.

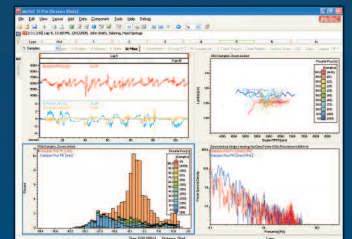
PROJECTS

Projects are central to the management of data in **i2**, particularly when dealing with multiple vehicles or motorsport categories. They store user settings, workbooks, maths and many other customisations. The menus and terminology for each Project have been adapted to suit that type of application, for example Circuit Racing, Drag Racing or Rally.

WORKBOOKS & WORKSHEETS

i2's Workbook and Worksheet structure is flexible and intuitive, allowing users to systematically organise their data into logical layouts. The software is equipped with templates that can be tailored to individual requirements for optimum data analysis efficiency.

Each Worksheet can contain any combination of analysis components including graphs, histograms, scatter plots, FFT plots, mixture maps, reports and various gauges, all of which can be individually customised.



GLOBAL CHANNEL PROPERTIES

Many channel properties such as colour, display units and min/max scales can be changed globally, allowing users to maintain consistency across all data components.

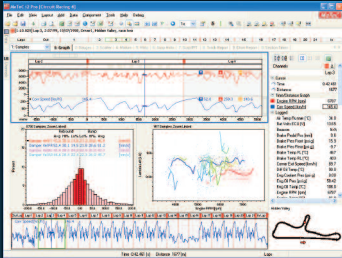
To switch display units, e.g. from metric into imperial, **i2** can perform Automatic Unit Conversion to update all instances with your preferred option.

USER DEFINED TRACK SECTIONS

Any number of sections may be defined by the user, allowing reports to be based on different sections of the track. These sections can then be used by components, such as Section Time Reports, Track Reports and Channel Reports.

FULLY CONFIGURABLE REPORTS

Track and Channel Reports may be configured to display information such as min, max, average and standard deviation of any channel across any section of the track.



CURSOR & ZOOM LINKING

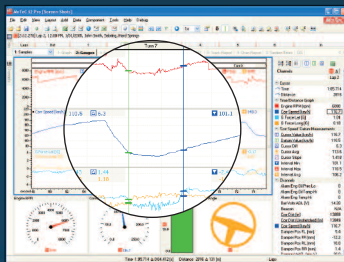
After loading a log file into *i2*, users may wish to zoom into certain sections of data for closer analysis - a single lap or one particular corner, for example.

By linking the zoom levels and cursor movement across multiple components such as graphs, histograms and scatter plots, the displayed data will shift in accordance with the selection, updating all components consistently. This feature ensures that users are always viewing accurate and up to date information for each channel.

DUAL CURSOR MEASUREMENTS

Differential measurements can be made by placing two, independently controlled cursors on the one graph.

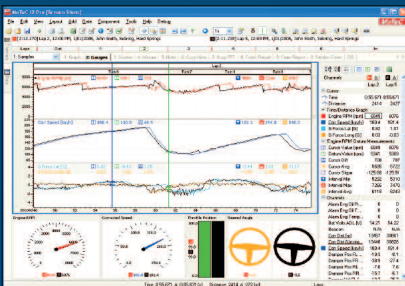
i2 automatically calculates the difference in channel value between the two cursors, as well as min, max, average and time/distance differential. Comparisons can also be made simultaneously across multiple overlays.



OVERLAYS

Overlays are useful in comparing the data from several laps or multiple sessions at the same track. Data may be from one driver or a comparison between two or more.

Whilst being equally effective in highlighting problematic areas, overlays can help to identify the best performance through a section of track. For example, users wanting to see the highest speed achieved through a particular section would display the speed trace then add a series of overlays, looking for the peak.



GRAPHICAL OVERLAY ALIGNMENT

Overlaid laps can be dragged graphically into position with the mouse, giving users fine control over data alignment.

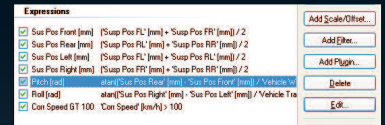
FAST 'ON DEMAND' MATHS PROCESSING

i2's Maths system uses an 'on demand' calculation mechanism to reduce data load times. Maths channels are only calculated as needed so you are never left waiting for unnecessary data. This is especially important when users are in a hurry and need answers fast.

MATHS EQUATIONS

i2 allows Maths equations to be entered in a clear and concise format.

Drawing on an extensive list of inbuilt functions (to which users may add), and logical conditions, any number of new channels can be derived.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
1	Time	10:00 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	11:26 AM	
2	Channel Name	Units																									
3	Vehicle General																										
4	Track Front	mm	2500																								
5	Track Rear	mm	2500																								
6	Track Front	mm	2500																								
7	Track Rear	mm	2500																								
8	Track Weight Front	kg	250																								
9	Track Weight Rear	kg	250																								
10	Track Weight Total	kg	500																								
11	Track Weight Front	kg	250																								
12	Track Weight Rear	kg	250																								
13	Track Weight Total	kg	500																								
14	Track Weight Front	kg	250																								
15	Track Weight Rear	kg	250																								
16	Track Weight Total	kg	500																								
17	Track Weight Front	kg	250																								
18	Track Weight Rear	kg	250																								
19	Track Weight Total	kg	500																								
20	Track Weight Front	kg	250																								
21	Track Weight Rear	kg	250																								
22	Track Weight Total	kg	500																								
23	Roll Over Threshold	mm	250																								
24	Roll Over Threshold	mm	250																								
25	Roll Over Threshold	mm	250																								
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SETUP SHEETS

i2's setup sheets allow vehicle setup parameters such as spring rates and gear ratios to be recorded for each log file.

These values can then be used in Maths to create vital analysis channels.

The setup sheets are stored in a spreadsheet, giving users a great deal of flexibility in how they use the data.

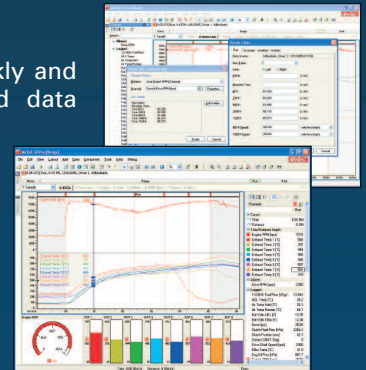
DATA EXPORTING

Data may be exported from many components including: Time/Distance Graphs, Histograms and Reports.

DRAG RACING AUTO RUN INSERTION

The auto insert feature quickly and precisely aligns the logged data against the actual run.

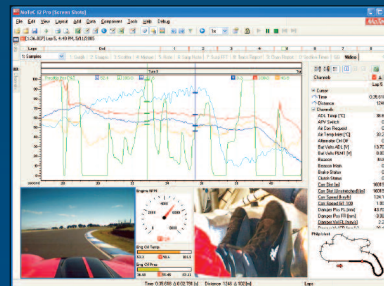
Users simply enter their time slip details and *i2* automatically determines the start of the run in the data. Teams can also make notes pertaining to the run, such as weather conditions.



VIDEO

i2 allows users to link multiple video streams (e.g. from in-car cameras) with logged data, enabling synchronised playback of footage alongside other analysis components.

Multiple camera angles can be viewed concurrently, and when Overlay Data is selected, these views update to show a side by side comparison.



No special hardware is required; users simply set up an existing video capture device, then link the footage with their logged data later.

OPTIONAL UPGRADES

The **MoTeC** ADL3 has field updatable options facilitated by a convenient password enabling system. This simple process allows users to purchase upgrades as they are needed.

Upgrade options include 52 Inputs/Outputs, Pro Analysis (required for *i2 Pro*), 250 MB Logging, Telemetry Support, and Remote Logging.

INPUT/OUTPUT UPGRADES

ADL3 Advanced Dash Logger	30 I/O (Standard)	52 I/O (Optional)
Analogue Voltage Inputs 0-5 V	4	8
Analogue Voltage Inputs 0-15 V	6	16
Analogue Temperature Inputs	4	8
Digital Inputs	4	4
Switch Inputs	4	4
Speed Inputs	4	4
Auxiliary Outputs	4	8
CAN Bus	100+	100+
Serial RS232 (ECU, GPS etc.)	100+	100+

See opposite for a detailed list of standard and optional features. The **MoTeC** SDL3 Sport Dash Logger is an alternative unit for those with more moderate requirements. Specifications for both models are shown for comparison.

TELEMETRY

MoTeC Telemetry Monitor software enables real time viewing of data via direct serial communication, GSM modems or radio modems. Data can be viewed in various formats such as dial gauges, bar and XY graphs, numerics, lights and scroll charts. All parameters are user definable.



Transmitted telemetry data can also be logged on the pit computer for immediate and detailed evaluation in *i2* while the vehicle is still out on track, assisting with strategic on-the-spot decisions and well planned pitstops.

ACCESSORIES

SENSORS

A wide range of sensors is available for use with the ADL3 including: linear potentiometers, accelerometers, strain gauges, ride height, gyro and tyre slip angle sensors, pressure sensors, temperature sensors (resistive, infrared and thermocouple), hall and magnetic speed sensors, Lambda sensors and many others.

LAP BEACONS

MoTeC's Lap Beacon Transmitter and BR2 Receiver offer superior optics, low power consumption and a high channel count (990) to eliminate accidental crossover with other racers' beacons. Multiple beacon capability allows users to generate split times by placing several **MoTeC** transmitters around the track, or utilising existing master beacons.

As a modern, convenient alternative, Lap Beacons (including split times) can be accurately generated by GPS.

SHIFT LIGHTS & WARNING LIGHTS

The ADL3 provides full flexibility and control over multiple, gear dependant, staged shift lights. In addition, users can set up an intelligent warning system that illuminates a single light, alerting the driver to a warning message on the screen. A **MoTeC** Shift Light Module can be used for this purpose.

WIRING

Two wiring options are available for the ADL3:

- Standard (vehicle style) wiring loom for specific permanent installations
- Custom wiring looms for complex installations

MoTeC SUPPORT & TRAINING

MoTeC is committed to delivering the highest level of customer service. Our worldwide team of support personnel and trained dealers provide expert technical assistance and advice on the most suitable system for each application. Product information, diagrams and software downloads are available at the website. **MoTeC** also conducts regular training seminars to help users make the most of their systems. Visit the website for details.

ALSO AVAILABLE FROM **MoTeC** - visit www.motec.com for details



ECUs:
MoTeC's range of ECUs includes: M4, M48, M400, M600, M800, M880 and M800 Plug & Play.



SVIM INPUT EXPANDER:
Compact CAN expander for logging high speed, high resolution inputs synchronously.



MINI DIGITAL DISPLAY:
The MDD is a compact satellite display for use with **MoTeC's** Dash Loggers or ECUs.



LAMBDA TO CAN MODULES (LTCs):
Monitor, control and diagnose Bosch LSU 4.9 Lambda sensors.



SENSORS & ACC'S
A full range is available to suit individual applications. Contact your dealer for details.

A comprehensive **MoTeC** Product Catalogue is now available at www.motec.com for free download.

DASH LOGGER FEATURES	ADL3	SDL3*	DASH LOGGER FEATURES	ADL3	SDL3*
GENERAL			OPTIONAL FEATURES		
Microprocessor: 32 bit high performance	✓	✓	52 I/O	✓	✗
Manufacturing Quality Standard	ISO9002	ISO9002	Logging Memory Upgrade	250MB	16MB/ 120MB
Power Supply	8V-32V 0.15A	8V-32V 0.15A	Internally Powered Backlight	✓	✓
High RFI Immunity CE and C-Tick	✓	✓	Pro Analysis (required for i2 Pro)	✓	✓
Reverse Battery Protection and Battery Transient Protection	✓	✓	Telemetry, Remote Logging	✓	✗
Ambient Operating Temperature Range	-10° to 70°C	-10° to 70°C	ACCESSORIES		
Size: 180mm x 91mm x 18mm (excluding connector)	✓	✓	Interface Cables	Ethernet	Ethernet
Weight: 385g (0.85lbs)	385g (0.85lb)	385g (0.85lb)	Beacon Transmitter and Receiver	Available separately	Available separately
Autosport Connector	79 pin	37 pin	LTC Lambda to CAN Modules	Up to 16	Up to 16
Warranty: 2 year parts and labour	✓	✓	COMMUNICATIONS		
DISPLAY			Ethernet IPV6 PC Connection	✓	✓
Custom reflective LCD, high contrast, high temperature tolerance	✓	✓	CAN Communication with programmable bus speeds	2	2
Backlit LCD	Optional	Optional	CAN Bus Diagnostics	✓	✓
Display any value from sensors, CAN bus, RS232 or calculations	✓	✓	CAN Communication Templates	32	10
Display Modes	3	3	RS232 Communication Template	✓	✓
70 Segment Bar Graph with user definable range and channel source	✓	✓	SOFTWARE		
Programmable Peak Hold and Set Point on bar graph	✓	✓	ADL3 Dash Manager Software	✓	✗
4 Numeric Display Items	✓	✓	SDL3 Sport Dash Manager Software	✗	✓
13 Digit Alphanumeric Display Area - 1, 2 or 3 channels per line	✓	✓	i2 Standard Data Analysis Software	✓	Logging required
Alarms	48	48	i2 Pro Data Analysis Software	Pro Analysis req'd	Pro Analysis req'd
Display Overrides top, left/right	2	2	Telemetry Software	Optional	✗
Number of Bottom Lines (overrides)	20 (4)	20 (4)	i2 DATA ANALYSIS SOFTWARE		
INPUTS			ANALYSIS COMPONENTS		
Analogue Voltage Inputs	10 (24 Opt.)	8	Graphs (number/number of channels)	Unlimited	5/12
Analogue Temperature Inputs	4 (8 Opt.)	4	Graph - Window Zoom	✓	✓
Digital Inputs	4	2	Graph - Min/Max/Average Measurements	✓	✓
Speed Inputs	4	4	Graph - Variance	✓	✓
Switch Inputs	4	0	Graph - Filter, Scale & Offset	✓	✓
Expansion Units:			Graph - Dual Cursor for comparative measurements	✓	✗
VIM/SVIM	2	✗	Graphical Errors and Status Display	✓	✓
E888: 8 AV Inputs, 8 Thermocouples, 4 Digital (20 inputs)	2 x 20 (Opt.)	2 (8 Thermocouples only)	Gauges (Configurable)	✓	✓
E816: 16 AV Inputs, 4 Digital (20 inputs)	2 x 20 (Opt.)	✗	Histogram (number/number of channels)	Unlimited	2/2
OUTPUTS			Suspension Velocity Histograms, Multi Channel	Unlimited	✗
Digital Outputs Switched output or PWM	4 (8 Opt.)	4	FFTs (Fast Fourier Transform), Multi Channel	Unlimited	✗
PID Control	✓	✗	Scatter Plots (number/number of channels)	Unlimited	2/2
E888 Expansion Unit (8 outputs)	2 x 8 (Opt.)	✗	Mixture Map (number/number of channels)	Unlimited	1/2
E816 Expansion Unit (8 outputs)	2 x 8 (Opt.)	✗	Track Map Report (number)	Unlimited	1
Gear Dependant Shift Lights	✓	✓	Rainbow Track Maps	Unlimited	0
INTERNAL SENSORS			Section Times Reports	Unlimited	1
Sensor Supply Voltage	✓	✓	Channel Reports	Unlimited	2
Internal Temperature	✓	✓	Synchronised Video	✓	✗
3 Axis G-Force: Lateral, Longitudinal, Vertical	✓	✓	DATA		
CALCULATIONS			Overlays	Unlimited	1
Speed, Lap Distance, Trip Distance and Odometer	✓	✓	Graphical Overlay Alignment	✓	✓
Lap Time and Number	✓	✓	Data Gating	✓	✗
Lap Time Gain/Loss	✓	✓	Animation	✓	✓
Timers (0.01s, 0.1s or 1s resolution)	12	8	Lap Stretching	✓	✓
3D Tables	16	4	TRACK		
2D Tables	16	4	Automatic Track Generation	✓	✓
Maths Functions	✓	✗	Track Section Editor (Standard Sections)	✓	✓
Gear Detection	✓	✓	User Defined Track Sections	✓	✗
Fuel Prediction	✓	✓	MATHS		
User Conditions	32	20	Basic Maths – Smooth, Scale & Offset	✓	✓
Running Min/Max	✓	Min Corner and Max Straight speeds	Wheel Lock Correction	✓	✓
DATA LOGGING			Maths Expressions - Plain Text Maths Editor	✓	✗
Memory, Non-Volatile Flash	16MB (250 Opt.)	Opt. 16MB/120MB	Maths Plugins (Maths Module)	✓	✗
Logging Rate	1-1000 samples/sec	1-500 samples/sec	Vehicle Setup Sheet (Vehicle Constants) (Excel)	✓	✗
Selectable Anti-aliasing Filter	✓	✓	Units Conversion	✓	✓
Selectable Cycle Through Logging Memory	✓	✓	2D/3D Tables	✓	✗
Quick Erase Function	✓	✓	DETAILS		
Logging Start/Stop Parameters	✓	✓	Details Editor	✓	✓
Maximum logging channels	300	300	Compare Details (side by side)	✓	✓
Status Channels	✓	✓	MISCELLANEOUS		
Engine Logs	4	1	User Definable Projects	✓	✗
Engine Log Conditions	6	6	Worksheets (number)	Unlimited	15
Tell-tales	40	✗	Application Profiles (Circuit/Rally/Drag/Engine)	✓	✓
Diagnostic Log	✓	✗	User Definable Worksheet Layouts	✓	✓
Pro Analysis (required for i2 Pro)	Optional	Optional	Colour Schemes, Global Channel Colours, Scales and Units	✓	✓
Remote Logging, Telemetry	Optional	✗	Channel Aliases and Mapping	✓	✓
SPECIAL FUNCTIONS			View Device Configuration	✓	✓
Access Passwords	✓	✓	Print	✓	✓
Preserved Channels	✓	✗			



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