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Engine Management, Data Acquisition & Display, Power Management, Accessories, Support

PRODUCT CATALOGUE

EUROPE 2015





Race smart.

MOTEC EUROPE LTD.

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TERMS AND CONDITIONS

- All prices quoted are in Pounds Sterling and are exclusive of VAT
- Freight charges are additional or by prior arrangement
- All MoTeC products are guaranteed for 2 years
Third-party products carry the warranty of the original manufacturer
- Contact MoTeC for details of your nearest authorised dealer
- Telephone orders **MUST** be confirmed by fax, post, or email
- Product and company names are trademarks or trade names of their respective companies
- Goods returned for credit must be received within 7 days from date of invoice in as new condition and include all supplied accessories and original packaging. A 10% re-stocking fee will be applied to all returns received after this period
- P.O.A. = Price (£) On Application; T.B.C. = To Be Confirmed;
F.O.C. = Free Of Charge
- Prices do not include installation, tuning, freight or miscellaneous connectors and fittings that may be required
- We do our best to maintain the accuracy of the details and information in this document. However, these details and information are for general informational purposes only and are subject to change

PRODUCT CATALOGUE

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C1 SERIES: 5" DISPLAY LOGGERS



Multi-value screen perfect for tuning

MoTeC's 5 inch Display Loggers incorporate an ultra bright high resolution colour screen, programmable multi-colour LEDs, and multiple screen layouts.

» 18029+29618: C125 Display Logger with Logging Enabled



Includes Gain/Loss indicator

Includes scope for 3 customised values along the bottom

C125

- Up to 13 inputs and 4 outputs
- Pin for pin compatible with CDL3
- Expandable I/O

C185

- Autosport connector
- Up to 38 inputs and 6 outputs
- Advanced Maths (option)
- T2 Telemetry (option)



» 18032: C125 Race Logging Kit

C125 RACE LOGGING KIT

Kit includes

- C125 Display Logger • 120 MB Logging memory • 10 Hz GPS
- Ethernet cable • Two pre-wired buttons • Ready to install plug-in loom



C1 25	PART NO.
C125 Display Logger (non-logging)	18029
C125 120Mb Logging Enable	29618
C125 Race Display (non-logging) Kit	18031
C125 Race Logging Kit	18032
C125 I/O Upgrade	29600
C125 Bike Race Logging Kit	79450
C125 Perspex Cover	79108
C125 Pro Analysis	29620
C125 Display Creator	29616

C1 85	PART NO.
C185 Colour Display Logger	18033
C185 44 I/O	29700
C185 Advanced Function	29705
C185 500MB Logging	29718
C185 Pro Analysis	29720
C185 T2 Telemetry	29723
C185 Display Creator	29716
C185 Mating Connector (79 Pin)	68080
C185 Loom	62206
C185 Perspex Cover	79108

C125 SPARES AND ACCESSORIES	PART NO.
C125 Input Loom	61259
OBD-II to Display Loom	61197
CAN ECU to Display Loom	61198
RS232 ECU to Display Loom	61199
Loom, Two Button	61221
Curly Cord - Terminated	61222
C125 Race Loom Terminated	62204
C125 Mating Connector	65044

LOGGING

Using typical data sets the C125 Display Loggers will store over 40 hours of club level logging, while the C185 will store 14 hours of professional level logging.

Review your logged data in i2



Powerful analysis. Intuitive software.

C1 SERIES: 7" DISPLAY LOGGERS



MoTeC's new range of 7 inch Display Loggers incorporate an ultra bright high resolution colour screen, programmable multi-colour LEDs, and multiple screen layouts.

C127

- Up to 13 inputs and 4 outputs
- Pin for pin compatible with CDL3
- Expandable I/O
- IP67 rated



C127 RACE LOGGING KIT

Kit includes

- C127 Display Logger • 120 MB Logging memory
- 10 Hz GPS • Ethernet cable • Two pre-wired buttons
- Ready to install plug-in loom

C127	PART NO.
C127 Display Logger (non-logging)	18036
C127 120Mb Logging Enable	29818
C127 Race Display (non-logging) Kit	18037
C127 Race Logging Kit	18038
C127 I/O Upgrade	29800
C127 Pro Analysis	29820
C127 Display Creator	29816

C127 SPARES AND ACCESSORIES	PART NO.
C127 Input Loom	61259
OBD-II to Display Loom	61197
CAN ECU to Display Loom	61198
RS232 ECU to Display Loom	61199
Loom, Two Button	61221
Curly Cord - Terminated	61222
C127 Race Loom Terminated	62204

C187

- Autosport connector
- Up to 38 inputs and 6 outputs
- Advanced Maths (option)
- T2 Telemetry (option)
- 250 MB Memory
- IP68 rated



C187	PART NO.
C187 Colour Display Logger	18035
C187 44 I/O	29900
C187 Advanced Function	29905
C187 500MB Logging	29918
C187 Pro Analysis	29920
C187 T2 Telemetry	29923
C187 Display Creator	29916

LOGGING

Using typical data sets the C127 Display Loggers will store over 40 hours of club level logging, while the C187 will store 14 hours of professional level logging.

Review your logged data in i2



Powerful analysis. Intuitive software.

D1 SERIES: DISPLAYS



D175 - New Colour Display

The D175 Colour Display is MoTeC's new display module which features a high resolution colour screen. The display uses the latest non reflective filter material to provide clear viewing even in direct sunlight.

Configurable via any compatible MoTeC data logger using the manager software. Display Creator is available as a free upgrade to D175.

- High resolution colour LCD display
- Suits dashboard mounting
- High brightness for sunlight readability
- 10 full colour (RGB) LEDs – fully programmable
- 8 Analogue inputs
- Autosport connector
- Sends input data to other devices via CAN
- Lightweight (320g)

ITEM	PART NO.
D175	18028
Autosport Mating Connector for D175	68087

D153 - Mini Colour Display

The D153 Mini Colour Display is an all new product developed to replace the existing MDD. Using the latest LCD colour technology this display provides superior screen quality in all light conditions. The screen filter reduces glare from the screen as well as reflections.

- Colour LCD Display
- High brightness for sunlight readability
- 8 Analogue inputs
- 6 Switch inputs
- Sends input data to other devices via CAN
- Compact for steering wheel mounting (96mm x 71mm) Lightweight (200g)



Configurable via any compatible MoTeC data logger using the manager software. Display Creator is available as a free upgrade to D153.

ITEM	PART NO.
D153	18027

i2 PRO: ACTIVATION CODES AND LICENCES



MoTeC's i2 Pro Data Analysis software includes new Feature Licences that can be purchased to activate a particular feature on one physical computer for a nominated length of time. The first features released include Licences to analyse non-i2 Pro log files using i2 Pro and a Licence to manipulate log files via an API (Application Programming Interface).

Licence to open MoTeC standard log files

- Allows individual PCs to open any MoTeC log file in i2 Pro
- Log files can be analysed using all i2 Pro features but will be saved in their original format
- Particularly useful for those that use i2 Pro software on one computer to analyse Standard and/or Pro log files from many MoTeC logging devices

Licence to import Pi ASCII dataset

- Allows individual PCs to convert exported Pi ASCII files into i2 Pro files, via the i2 Pro File Conversion Wizard
- Ideal for MoTeC users who previously had a Pi logging system and would like to analyse this data in i2 Pro alongside their current data, or for existing Pi users to take advantage of i2 Pro's extensive analysis features

i2 API Licence

- Provides access to and manipulation of MoTeC log files from tools such as MS Excel, MATLAB, Visual Basic and Visual C++ for custom processing or external analysis of data generated in i2 Pro
- Enables the i2 Application Programming Interface that can be used from any language that supports COM technology

The functionality of the i2 API software object includes:

- Loading any MoTeC log file (.ld file)
- Reading MoTeC log file data including channels, ranges, laps, beacons and details
- Creating new i2 Pro log files and channels from code

i2 ACTIVATION CODES AND LICENCES	PART NO.
Open i2 Standard Files (1 year)	22011
i2 API Licence (1 year)	22021
i2 import MoTeC CSV Dataset (30 days)	22080
i2 import MoTeC CSV Dataset (1 year)	22081
Import Pi ASCII Files (30 days)	22030
Import Pi ASCII Files (1 year)	22031

POWER DISTRIBUTION MODULES (PDM) & SWITCH PANELS

Mating connector
available separately



MoTeC Power Distribution Modules (PDM) are designed to replace conventional relays, fuses and circuit breakers, simplifying wiring and reducing weight while increasing reliability. They not only provide electronically switched power to various systems in the vehicle, but can also provide full diagnostic information, including output currents and error status, enabling teams to monitor the entire vehicle via telemetry.

NOW AVAILABLE
IP68 RATED, PDM16M & PDM32M
*Suitable for continuous immersion
in water above 1 metre.*

*These units are nitrogen filled
and have blind mounting points.*



POWER DISTRIBUTION	PART NO.
PDM16 Power Distribution Module	14102
PDM16M Power Distribution Module (IP68 Rated)	14102M
PDM32 Power Distribution Module	14100
PDM32M Power Distribution Module (IP68 Rated)	14100M
PDM15 Power Distribution Module	14104
PDM30 Power Distribution Module	14103
PDM CONNECTORS	PART NO.
PDM15/30 Connector Kit	95560
PDM16/32 8-way Connector (AS616-08SN)	68088
PDM16/32 26-way Connector (AS616-26SN)	68086
PDM32 37-way Connector (AS614-35SN)	68100
PDM16/32 BATTERY + CONNECTOR (ASHD614-1SN-C25)	PART NO.
PDM Batt+ Connector, 1m cable, straight boot	68062
PDM Batt+ Connector, 1m cable, 90° boot "Left" orientation	68063
PDM Batt+ Connector, 1m cable, 90° boot "Right" orientation	68064
PDM15/30 BATTERY CABLE	PART NO.
PDM15/30 1m Battery Cable with pre-crimped terminal	79143

Switch Panels

Customise your backlit keypad by choosing which semi transparent label to apply to the button surface from the wide variety supplied. The keypad also has 3 LED indicators on each button to display the status of the outputs from the MoTeC PDM. The keypad is backlit with adjustable brightness. Up to 30 buttons from multiple keypads may connect to the PDM via the CAN bus.

SWITCH PANELS	PART NO.
15 Position CAN Keypad	41400
8 Position CAN Keypad	41401
4 Way DTM Female Connector	79145





Access to your factory or aftermarket ECU using our accessory looms.
OBD-II Loom connects in many modern road vehicles.



Mating connector available separately

CDL3 - CLUB DASH LOGGER

Built with the same technology and quality as ADL3 and SDL3 to give entry level racers the professional edge.

- Logging memory up to 8MB
- Lightweight, programmable with adjustable backlight
- Capable of display, logging and controlling all in one
- User defined screen layouts, messages and warnings
- 3 pages (for warm up, practice and race)
- 1x CAN, 1x RS232 with additional RS232 or CAN port

CDL3 AND UPGRADES	PART NO.
CDL3 Club Dash Logger Backlit (Non Logging)	18022
CDL3 Logging Enable (enables 8MB logging memory)	29518
CDL3 12 I/O Upgrade	29500
CDL3 Pro Analysis Upgrade	29520
Mating Connector for CDL3	65044

CDL3 TRACK DISPLAY KIT AND CDL3 TRACK LOGGING KIT

Track Display Kit; Includes: CDL3, SLM-C Club Shift Light Module, 10hz GPS, two pre-wired buttons, professional quality plug-in loom, with plug-in power adaptor and ethernet cable. **Track Logging Kit;** Includes: All the contents of the Track Display Kit plus the 8Mb Logging Enable Upgrade.

CDL3 TRACK DISPLAY AND TRACK LOGGING KIT	PART NO.
CDL3 Track Display Kit	18023
CDL3 Track Logging Kit	18024
CDL3 Track Display Kit with SLM (instead of SLM-C)	18026
SPARES AND ACCESSORIES	PART NO.
CDL3 Accessory Kit (includes SLM-C, GPS, CDL3 terminated loom, two button loom and RJ45 ethernet cable)	61224
CDL3 to I/O Loom	61196
CDL3 to OBD-II	61197
CDL3 to CAN ECU	61198
CDL3 to RS232 ECU	61199
CDL3 Two Button Loom	61221
CDL3 Curly Cord	61222
CDL3 Loom, Terminated	62203
CDL3 Kawasaki ZX10R Bike Logging Kit	79460
CDL3 Perspex Cover	79107

ADL3 / SDL3

ADL3 UPGRADES	PART NO.
250MB Logging Memory (upgrade from 16MB to 250MB)	29315
Extension to 52 Input/Outputs	29301
Pro Logging Advanced Analysis	29320
Telemetry Support	29321
Remote Logging (requires telemetry upgrade)	29322
ADL3 T2 Telemetry	29323
ADL3 Perspex Cover	79107
SDL3 UPGRADES	PART NO.
Logging Enable (enables 16MB logging memory)	29414
120MB Logging Memory (upgrade from 16MB to 120MB)	29415
Pro Logging Advanced Analysis	29420

DATA LOGGING SYSTEMS

The MoTeC Central Logging System consists of an ACL (Advanced Central Logger) plus multiple SVIMs (Synchronised Versatile Input Modules). Mating Connectors available separately.

DATA LOGGING SYSTEMS	PART NO.
ACL 4CAN Advanced Central Logger	18108
ACL 6CAN Advanced Central Logger	18109
ACL USB Logging Kit	18113
EDL3 Enclosed Dash Logger (includes 16MB logging)	18016
250MB Logging Memory upgrade for the EDL3	29315
ACL Advanced Central Logger (inc. 1GB card, pro analysis & Ethernet comms lead)	18105
22 Pin Autosport ACL Connector (AS612-35SN)	68087
T2 Telemetry / Remote Logging	25023
Remote Logging (requires telemetry upgrade)	25022

Expansion Modules

EXPANSION MODULES	PART NO.
E888 Expander Module (supplied with plastic connectors)	14007
E816 Expander Module (connector not supplied)	14008
66 Pin Autosport E816 Connector (AS618-35SN)	68089
SVIM Versatile Input Module	18111
5 Pin Autosport VIM CAN/Power Connector (ASL606-05SN)	68098
55 Pin Autosport VIM Sensor Connector (AS616-35SN)	68090

ADR - Accident Data Recorder

The MoTeC ADR records lateral, longitudinal and vertical chassis G-force data during an accident. Readings are made continuously (cyclic logging) to allow data capture immediately previous to the log triggering event.

- Designed to the specifications of the FIA Institute for Motorsport Safety
- Generates data that can help to better understand forces in high impact collisions and may assist with the medical assessment of drivers
- Maintenance free, no batteries, internal backup power
- Configurable trigger levels with external LED support

ACCIDENT DATA RECORDER	PART NO.
ADR	18116

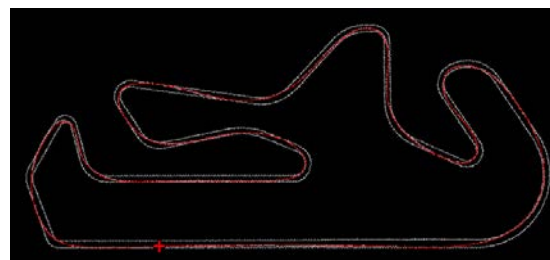
HD-VCS: Bringing true HD with Live gauges to motorsport

The HD-VCS provides numerous features designed specifically for the racing environment.

HD-VCS	PART NO.
HD-VCS Video Capture System Kit	18207
SPARES	PART NO.
HD-VCS Unit	18207C
HD-VCS Camera	18208
HD-VCS Microphone	18209
HD-VCS Camera Cable (2m)	61237
SD Card Extreme 32GB	61241
HD-VCS Power and CAN Cable (2m)	61243
HD-VCS Camera Lens Cover	61242
HD-VCS Card Slot Cover	61246
HD-VCS Camera Mount	65088
HD-VCS Short Roll Cage Mount	65090
OPTIONAL EXTRAS	PART NO.
HD-VCS Camera Cable (4m)	61238
HD-VCS Camera Extension Cable (2m)	61239
HD-VCS Long Roll Cage Mount	65089



LAP TIMING & TRACK MAPPING



Beacons

BEACON	PART NO.
MoTeC BTX Beacon Transmitter - Pit wall	15500
MoTeC BR2 Beacon Receiver - Vehicle mounted	15512
BEACON ACCESSORIES	PART NO.
5 Pin Autosport BR2 Connector (ASL606-05SN)	68098
BR2 Configuration Loom (for programming advanced features)	61048
Replacement BTX Power Lead	61033



GPS Units

GPS Units allow vehicle position, speed, and heading data to be sent to a MoTeC logging device, which can then be used for the drawing of track maps and analysis of driving lines in the i2 analysis software. GPS units can also be used for Lap Timing instead of an infrared beacon, when used in conjunction with a CDL3, SDL, SDL3, ADL2, ADL3, or ACL.

5HZ / 10HZ GPS	PART NO.
GPS-L5 5Hz GPS (ECU)	79325
GPS-L10 10Hz GPS (Data)	79324
Mating Connector (4-Way DTM Female)	68054



Professional GPS consists of a base unit in an aluminium case with Autosport connector, and separate antenna. The units are available with update rates of 10Hz or 20Hz, and can be specified to transmit GPS data either via RS232 or CAN through an internal MoTeC Serial to CAN convertor. Baud rate should be confirmed when ordering. Mating connector sold separately.

PROFESSIONAL 10HZ / 20HZ GPS	PART NO.
Pro 10Hz GPS V2	79206
Pro 20Hz GPS V2	79204
13 Way to 5 Way GPS Adaptor	79205
ACCESSORIES	PART NO.
13 Pin Autosport Professional GPS Connector (AS610-35SA)	68010
Spare GPS Antenna for Professional Unit	41305



M1 SERIES



ENDLESS POSSIBILITIES

Advances in technology have increased the demands on a vehicle's components, especially the ECU. This demand has reached the point where a single firmware to ECU configuration cannot meet the market's ECU requirements (even with increased capacity and processor speed).

The M1 series was conceived by MoTeC to overcome this one-to-one, firmware to ECU limitation, by designing a system where operational efficiency, advanced features and flexibility are its primary objectives. At its core, the M1 solution combines flexible hardware with the ability to develop tailored packages using M1 Build (part of the M1 Development Kit), making it ideal for any application (however complex) and category management.

- Latest generation high performance processor
- Large logging memory, fast Ethernet downloads
- Compact and lightweight (robust magnesium enclosure)
- Supports direct injection and port injection applications
- Supports advanced logging features including Pro Analysis (i2 Pro)
- Advanced security system, incorporating an anti-tampering microprocessor
- Access log-in levels for multiple users

M1 SERIES: DEVELOPMENT



M1 Development ECU

An M1 Development ECU Licence enables any M1 ECU to accept custom firmware written by M1 Build developers.

M1 Build

A revolution in Engine Management customisation

- M1 BUILD is an Integrated development platform for creating tailored M1 ECU packages
- M1 BUILDS exceptional flexibility enables you to create your own strategy for a great range of engines

M1 Build enables ECU developers to design and create customised ECU packages. This means that rather than every customer having to use one generic firmware for every application, skilled individuals can customise ECU firmware to meet the needs of specific projects.

		M1 SOLUTION: M1 PACKAGE PLUS M1 ECU					
	PACKAGE ONLY	M130	M150	M170	M190	M142	M182
M1 Package Licence							
M1 Development ECU Licence	23102	23102+13130	23102+13150	23102+13170	23102+13190	23102+13142	23102+13182

M1 SERIES: PLUG-IN ECU KITS



M150 Nissan R35 GT-R Plug-In ECU Kit

This kit is a fully programmable replacement for the factory-fitted engine ECU. No rewiring is necessary because the kit plugs straight into the stock wiring harness and uses the original sensors and fuel system. All essential Original Equipment (OE) functions are maintained, including dashboard, VDC traction control and gearbox systems.

This Plug-In ECU kit has been designed for compatibility with the Nissan R35 GT-R in all geographic regions, years 2007–13.

- Intelligent, next generation engine control
- Quick, plug-in installation
- Easy tuning with MoTeC's M1 Tune software*
- Full integration with factory systems
- Full cruise control capability
- Torque limiting delivered via throttle and ignition control
- Integrated, fully tuneable DSP knock control on individual cylinders
- M1 Level 2 Data Logging with 250 MB on board memory

M150 NISSAN R35 GT-R PLUG-IN ECU KIT

PART NO.

M150 Nissan R35 GT-R Plug-In ECU Kit

11502/11501



M130 PWC Plug-In Kits

All PWC kits include - M130 Marine ECU, the compatible package and licence, M1 Tune software, plug-in adaptor loom, mounting kit, Data Logging Level 1 (10 Hz, 100 channels, 120mb).

M130 PWC PLUG-IN ECU KITS	COMPATIBLE WITH	PART NO.
Yamaha FXSHO 2008	FXHO, FXSHO, FZR, FZS, VXR	11302
Sea-Doo	RXT-X & IS 2010 onwards, RXP-X 2012 onwards	11301
Hydrospace	Hydrospace S4	11303

M1 SERIES: VERSATILE SOLUTIONS



23060 GPA / 23061 GPR

MoTeC's GPA and GPR are versatile M1 Packages for the operation of port-injected engines. They can be configured to perform a vast array of tasks, from a simple engine to a dual drive-by-wire quad cam boosted engine with sequential gearbox and more.

Configurable Ref/Sync modes accommodate many modern engine triggering systems. These products also handle many modified road vehicle systems, such as air conditioning control and has four additional definable control outputs.

GPA and GPR packages incorporate many features, such as Pit Speed Limiting, Switchable Fuel, Ignition and Boost Trimming, Knock Control, Intercooler Sprays, DBW and CAM Control. The GPR package has in addition to that list, Traction Control, Gear Change Ignition Cut, Anti-Lag and Launch Control.

ECU Input and Output pin allocations can be user-defined to suit individual requirements and self updating wiring schematics are provided.

Finally these packages are comprehensively integrated with other MoTeC products, utilising pre-defined CAN messaging for ADL/SDL/CDL, E888, VCS, GPS, ADR, BR2, PDM and SLM.



23008 GPR-DI

The GPR-DI Package is a versatile and adaptable platform for operation of four, five, six, eight ten and twelve cylinder direct-injected engines (hardware dependant) that use inductive direct injectors and synchronous direct injection fuel pumps, such as Bosch HDP5 and Hitachi HFS034.

In addition to the primary direct injectors, secondary port injectors may be configured.

Only saturated (high-ohm) secondary injectors are supported in this hardware. Peak-hold (low-ohm) secondary injectors are not supported.

Included are many ancillary features commonly found on race cars, such as anti-lag, driver switches (pitswitch, launch enable, boost trim, etc.), gearbox control, knock control, intercooler sprays, launch control, gearbox coolant pumps and traction control. Also accommodated are many systems found on modified road vehicles, which may also be useful in a racing context, such as air conditioning control.



23068 GPRP

Based on MoTeC's successful M1 GPR package the GPRP package adds the functionality of a fully integrated gearshift module including paddle shift actuation with full control over throttle blip and cut.

The package marries advanced engine and gearbox control together, to form a seamless solution for the serious racer.

M1 SERIES: DEDICATED SOLUTIONS

FULL CAR INTEGRATION



23002 NISSAN R35

Complete, plug in, turn key solution replacing R35 OE ECU, runs factory car features.

ENGINE ONLY



23007 NISSAN VK50VE

Package only, suitable to run the engine only including VVL system when wired appropriately

PORT AND DI INJECTION



23004 TOYOTA 86

Package Only, Replaces OE ECU, runs 86 engine and factory car features, plug in loom available

DIRECT INJECTION



23069 MINI R56

Package Only, Replaces OE ECU, runs Mini engine and factory car features when wired appropriately

DIRECT INJECTION



23006 FORD FIESTA

Package Only, Replaces OE ECU, runs Fiesta ST engine and factory car features when wired appropriately

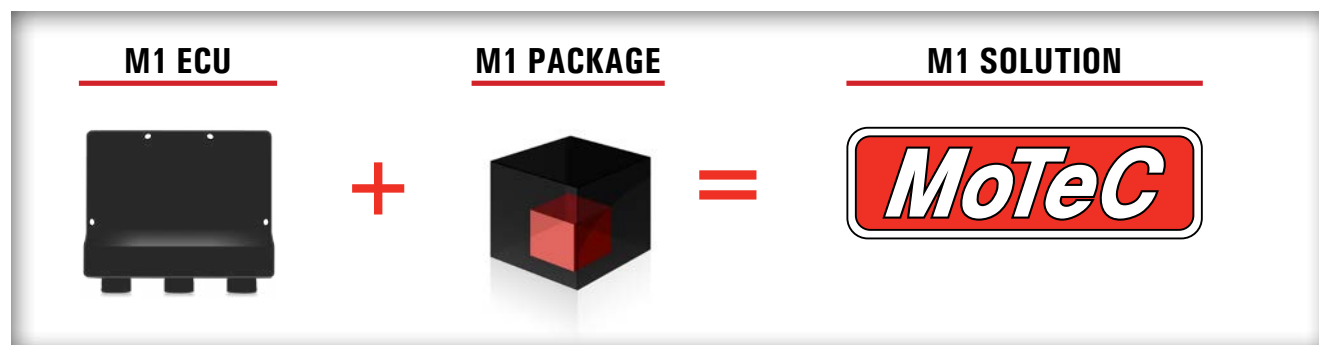
FIA SPECIFICATION



23143 RALLY CROSS

Package only, runs multiple engine types, complies to FIA Rally cross rules

M1 SERIES: SOLUTIONS



		PACKAGE PLUS M1 ECU					
	PACKAGE ONLY	M130	M150	M170	M190	M142	M182
M1 PACKAGE LICENCE	PART NO						
Custom Motorcycle Licence	23058	23058 + 13130	23058 + 13150	23058 + 13170	23058 + 13190	—	—
GPA	23061	23061 + 13130	23061 + 13150	23061 + 13170	23061 + 13190	—	—
GPR	23060	23060 + 13130	23060 + 13150	23060 + 13170	23060 + 13190	—	—
GPRP (GPR plus Paddle Shift)	23068	23068 + 13130	23068 + 13150	23068 + 13170	23068 + 13190	—	—
GPR-DI	23008	—	—	—	—	23008 + 13142	23008 + 13182
FIA Rallycross 2014	23143	23143 + 13130	23143 + 13150	—	—	—	—
Ford Fiesta	23006	—	—	—	—	23006 + 13142	—
Mini R56 2008 N14B16	23069	—	—	—	—	23069 + 13142	—
Nissan GT-R 2007 VR38DETT Engine	23002	—	23002 + 13150	—	—	—	—
Nissan VK50VE 2009	23007	—	23007 + 13150	—	—	—	—
Toyota 86 2012 FA20D	23004	—	23004 + 13150	—	—	—	—
M1 Development ECU Licence	23102	23102 + 13130	23102 + 13150	23102 + 13170	23102 + 13190	23102 + 13142	23102 + 13182

		PACKAGE PLUS M1 ECU	
	PACKAGE ONLY	M130M	M150M
M1 PACKAGE LICENCE	PART NO.		
Hydrospace S4 2005	23001	23001 + 13130M	23001 + 13150M
Sea-Doo RXT-X 2010	23001	23001 + 13130M	23001 + 13150M
Yamaha FX SHO 2008	23001	23001 + 13130M	23001 + 13150M

M1 ECU	PART NO.
M130	13130
M150	13150
M170	13170
M190	13190
M142 (DI)	13142
M182 (DI)	13182
Marine (hardened extreme) version	+M

M1 PACKAGE LOOMS	PART NO.
M1 Toyota 86 Loom	61264



M1 SERIES: UPGRADES

Within the M1 ECU there are 3 levels of data logging available. All ECUs come with basic diagnostic logging, Level 2 increases this to 100 channels at 200Hz and Level 3 increases this to 1000 channels at 1000Hz.

M1 DATA LOGGING LEVELS	UPGRADE CHANGE	PART NO.
Level 2 Data Logging	Logging increase to 100 channels at 200Hz	23011
Level 3 Data Logging	Logging increase to 1000 channels at 1000Hz	23012
i2 Professional Logging Analysis	i2 Pro Licence	23014



M84 ECU

The versatile MoTeC M84 ECU delivers a unique package of professional level features at an entry-level price. The M84 is suitable for a broad range of high performance engine applications, including engines with up to 8 cylinders. It also suits rotary engines with twin, triple or quad rotors.

It is based on the same advanced technology pedigree as MoTeC's world-renowned benchmark M800 ECU. The M84 ECU shares the same sophisticated processor and Windows software platform but with a package of features to suit more moderate system requirements.

Includes permanently enabled on-board Wideband Lambda plus 512kB of data logging memory as standard.

M84 ECU	PART NO.
M84 ECU	13084
M84 ECU UPGRADES	PART NO.
Advanced Functions (includes Hi-Lo, Traction, ORB, Gear cut)	27104
Hi-Lo Injection (Secondary Injection)	27101
Traction Control and Launch Control (2, 3 or 4 wheel)	27102
Dual Lambda	27103
Over Run Boost (anti-lag)	27117
Gear Change Ignition Cut (flat shifts)	27118

M400 ECU

The M400 offers four injector drivers and four ignition outputs, and is a fully programmable management system ideal for engines up to four cylinders with sequential injection and multi-coil ignition. It is also well suited to twin rotary applications. Eight auxiliary outputs provide control for aftermarket devices and systems providing functions such as 3D boost control, nitrous injection, intercooler spray bars, idle speed, shift lights, warning alarms and many more.

Includes mating connectors.

M400 ECU	PART NO.
M400 ECU	13040
M400 ECU UPGRADES	PART NO.
M400 Advanced Functions Upgrade	
(allows anti-lag, traction and launch control, full throttle upshift, pit speed limiting, etc)	24105
M400 Logging Only Upgrade (512kB)	24101
M400 Lambda Upgrade	24102
M400 Drive by Wire (contact us for supported applications)	24112
M400 Camshaft Control (contact us for supported applications)	24116
M400 Over Run Boost	24117
M400 Pro Analysis	24104



M600 ECU

The M600 offers six injector drivers and six ignition outputs, and is a fully programmable management system ideal for engines up to six cylinders with sequential injection and multi-coil ignition. It is also well suited to triple rotary applications. Eight auxiliary outputs provide control for aftermarket devices and systems - functions such as 3D boost control, nitrous injection, intercooler spray bars, idle speed, shift lights, warning alarms and many more. Includes mating connectors.

M600 ECU	PART NO.
M600 ECU	13060
M600 ECU UPGRADES	PART NO.
M600 Advanced Functions Upgrade (allows anti-lag, traction and launch control, full throttle upshift, pit speed limiting, etc)	26105
M600 Logging Only Upgrade (512kB)	26101
M600 Lambda Upgrade	26102
M600 Dual Lambda Upgrade (requires single lambda upgrade)	26103
M600 Drive by Wire (contact us for supported applications)	26112
M600 Camshaft Control (contact us for supported applications)	26116
M600 Over Run Boost	26117
M600 Pro Analysis	26104

M800 AND M880 ECUS

The M800 offers eight injector drivers (with twelve as an option) and six ignition outputs, and is a fully programmable management system ideal for engines up to twelve cylinders with sequential injection and multi-coil ignition. Includes mating connectors.

The M880 has the same facilities as the M800 but includes the Advanced Functions Upgrade, Single Lambda, 1MB Logging Memory, Autosport Connector and option to expand to 4MB logging memory. Mating connector available separately.

M800 AND M880 ECUS	PART NO.
M800 ECU Standard Tuning	13001
M880 Professional	13002
M800 ECU UPGRADES	PART NO.
M800 Advanced Functions Upgrade (allows anti-lag, traction and launch control, full throttle upshift, pit speed limiting, etc)	28105
1Mb Logging Memory (M800 Only)	28101
4Mb Logging Memory (M880 Only)	28108
Pro Logging Advanced Analysis	28104
Single Lambda Support	28102
Dual Lambda Support (requires single lambda upgrade)	28103
Telemetry Support	28107
Remote Logging Upgrade (requires telemetry upgrade)	28109
10/12 Cylinder Sequential Support	28111
Drive by Wire (contact us for supported applications)	28112
Multi-Pulse Injection and Multi-Spark Ignition	28115
Servo Motor and Stepper Motor Drive	28113
Camshaft Control (contact us for supported applications)	28116
M800 Over Run Boost	28117

OEM PLUG-IN ECU SYSTEMS

The M800 OEM is designed as a Plug-In ECU for Mitsubishi and Subaru applications and is based on the M800 ECU. The Plug-In ECU is designed to use the vehicle's existing wiring, with no need to remove or add sensors. Customised with OEM connectors, these replacement boards eliminate the need for adaptor looms, and fit straight into the factory ECU box. The M800 OEM has all the facilities of the M800 except it can only drive low current type fuel injectors.

The Diff Controllers are direct replacements for Mitsubishi and Subaru driver-controlled centre differentials, allowing a number of user-defined configurations to determine the operating characteristics of the centre differential.

Now available: MDC2 Diff Controller for the Mitsubishi EVO X RS and GSR.

Included ECU Codes and Lower Prices

MoTeC now includes selected Upgrade Codes Free of Charge for each OEM type, within the current ECU price.

Additionally we have lowered the total price of the Mitsubishi EVO X and the Subaru 9/10 ECUs. The part numbers will remain the same and the parts listing below explains which codes are now included with each OEM ECU type and the end total price.



Mitsubishi

M800 OEM PLUG-IN ECUS	PART NO.
NOTE: EVO 9 versions require the addition of part 28116 Cam Control Upgrade	
Mitsubishi EVO 4-8 (4 plug) Adv. Functions and 1Mb logging incl	13009A
Mitsubishi EVO 8/9 (3 plug, EVO 8 MR/GSR and EVO 9) Adv. Functions and 1Mb logging included	13010A
Mitsubishi EVO 9 Cam Control Upgrade	28116
Mitsubishi EVO X RS-GSR Cam, DBW and Adv. Functions incl.	13014A
EVO X ECU to CAN Loom	61231
NOTE: It is essential to specify at time of ordering if you require an RS or GSR version	
DIFF CONTROLLERS	PART NO.
MDC Mitsubishi Diff Controller (EVO 7,8 and 9)	14012
MDC2 Mitsubishi Diff Controller (EVO X RS-GSR)	14016

Subaru

M800 OEM PLUG-IN ECUS	PART NO.
NOTE: Subaru STi versions require the addition of part 28116 Cam Control Upgrade	
Subaru Version 5-6 Adv. Functions and 1Mb logging included: Before 2001	13004A
Subaru Version 7/8 (WRX, UK/Jap/USA versions) Adv. Functions and 1Mb logging included: 2001 - 2007	13008A
Subaru Version 9/10 Cam, DBW and Adv. Functions included	13012A
Subaru STi Cam Control Upgrade	28116
DIFF CONTROLLERS	PART NO.
MoTeC SDC1 Subaru Diff Controller (WRX STi 2003)	14009
MoTeC SDC2 Subaru Diff Controller (2004/5/6 models)	14010
MoTeC SDC3 Subaru Diff Controller (2008 models)	14015

PLUG-IN ECU KITS



PWC Plug-In ECU Kits

MoTeC PWC Plug-In ECU kits are fully programmable, direct replacements for factory ECUs on a select number of popular PWC models, based around the M400M Marine ECU. The system can be purchased as a kit complete with an adaptor wiring loom, mounting brackets and DBW upgrade where required. PWC Plug-In kits are convenient and cost effective to install because they eliminate the need to rewire the PWC. They simply plug into the factory wiring harness using the original sensors and fuel system. Alternatively the parts can be bought individually.

PWC MODELS	PART NO.
M400 PWC Kit for Yamaha FX-SHO, FZS/FZR (Includes Drive By Wire)	13041
M400 PWC Kit for Kawasaki Ultra 250X, 260X	13042
M400 PWC Kit for Kawasaki Ultra 300X (Includes Drive By Wire)	13048
M400 PWC Kit for Sea-Doo RXP, RXP-X, RXT	13043
M400 PWC Kit for Hydrospace S4	13044
M400 PWC Kit for Sea-Doo 2010 RXT-X-260, 260iS (Includes Drive By Wire)	13045
ACCESSORIES - TO ORDER (2 WEEK LEADTIME)	PART NO.
Wiring Adaptor Kit for Yamaha FX-SHO, FZS/FZR	61143
Wiring Adaptor Kit for Kawasaki Ultra 250X, 260X	61151
Wiring Adaptor Kit for Sea-Doo RXP, RXP-X, RXT	61157
Wiring Adaptor Kit for Hydrospace S4	61160
Wiring Adaptor Kit for Sea-Doo 2010 RXT-X-260, 260iS	61170
Wiring Loom only for Yamaha FX-SHO, FZS/FZR	61142
Wiring Loom only for Kawasaki Ultra 250X, 260X	61144
Wiring Loom only for Sea-Doo RXP, RXP-X, RXT	61155
Wiring Loom only for Hydrospace S4	61166
Wiring Loom only for Sea-Doo 2010 RXT-X-260, 260iS	61171
Marine M400 ECU	13040M
Yamaha Injector YP 725cc	34016
Yamaha Injector Connector Kit Uskar	34017
Yamaha Adaptor Top 11mm for YP Injector	34018

Hayabusa Kit

MoTeC offer a choice of two working Plug-and-Play ECU and wiring kits as direct replacements for the factory ECU on Suzuki Hayabusa models Gen I and Gen II, based around the M84 and M800 ECUs.

The PNP kit includes the adaptor box, wiring harness, lambda sensor, Bosch ignition amplifier, custom ECU mount with hardware and either a MoTeC M84 or M800 ECU depending on type.



HAYABUSA KIT	PART NO.
Hayabusa PNP Kit - M84 ECU version	13084-Hayabusa
Hayabusa PNP Kit - M800 ECU version	13001-Hayabusa
Wiring loom Adaptor Kit Only - (without ECU)	79170

ECU ACCESSORIES

ECU Accessories include a mating connector unless otherwise stated

ECU ACCESSORIES	PART NO.
Ignition Expander	14001
AS Connector Ignition Expander (needs connector 68087)	14006
Traction Control Multiplexer	14002
AS Connector TC Multiplexer (needs connector 68087)	14005
Pierburg Boost Control Valve (includes connector)	58004
3 Port Boost Control Valve	58020
ECU ACCESSORY CONNECTORS	PART NO.
22 Pin Autosport IEX/TCMux Connector (AS612-35SN)	68087



DBW-4 Drive By Wire Module

The DBW-4 works with M400/M600/M800/M880 ECUs running firmware V3.30T and later, and provides 4 PID Controllers for drive by wire control, or generic PID control for servo motors. The use of a DBW-4 does not require a DBW upgrade in your ECU. Mating connector available separately.

DBW-4 DRIVE BY WIRE MODULE	PART NO.
MoTeC DBW-4	14011
66 Pin Autosport DBW-4 Connector (AS618-35SN)	68089



Knock Monitoring and Control

Knock Modules work with vehicle knock sensors to provide individual cylinder closed loop knock control, allowing tuners to safely optimise high performance ignition maps. There is a standalone module and a version specifically designed to mount onto an M800 Plug-In ECU. A competent tuner needs to carry out a frequency analysis to determine the target frequency and knock module settings. This is highly specialised work.

MoTeC Knock Modules will only be available through authorised dealers that have undertaken specific training.

KNOCK MONITORING AND CONTROL	PART NO.
OKM Onboard Knock Module (for M800 PandP ECUs)	53115
Mitsubishi EVO X OKM Onboard Knock Module	53121
SKM Standalone Knock Module	53116
Knock Sensor Loom (for use with SKM)	61114
DTM Connectors for SKM	68054



DHB - Dual Half Bridge

The DHB is a high current amplifier which allows low current auxiliary outputs to drive high current loads such as motors. It contains two high current half bridge outputs, and connects to any auxiliary output of a MoTeC ECU or Dash Logger, which performs the control function, such as PWM speed control, direction control or servo control. Mating connectors available separately.

DHB DUAL HALF BRIDGE	PART NO.
DHB Dual Half Bridge (needs connectors 68050, 79121 & 79125. See pg 24)	41213



LAMBDA MEASUREMENT

LTC - Lambda To CAN Module

MoTeC's LTC (Lambda to CAN) modules monitor, control and diagnose Bosch LSU 4.9 Lambda sensors, transmitting readings on a CAN bus. When multiple LTCs are used, up to 32 Lambda sensors can be configured on a single CAN bus, allowing a CAN-enabled ECU or logging device to simultaneously monitor numerous Lambda sensors. The LTC is also available as a dual version LTCD to work with two sensors into one module. Sensor sold separately.

LAMBDA TO CAN MODULE	PART NO.
LTC Lambda to CAN Module	61300
LTCD Dual Lambda to CAN Module	61301
Mating Connector	68054

LTC-NTK

MoTeC's LTC NTK (Lambda To CAN) module monitors, controls and diagnoses an NTK Lambda sensor, and transmits Lambda readings on a CAN bus. When using LTC NTKs, up to 32 Lambda sensors can be configured on a single CAN bus allowing an ECU or logging device to simultaneously monitor multiple Lambda sensors. Compatible with NTK UEGO sensors. Sensor sold separately.

LTC-NTK	PART NO.
LTC-NTK	61304
LTC-NTKD	61305

PLM - Professional Lambda Meter

PROFESSIONAL LAMBDA METER	PART NO.
PLM Professional Lambda Meter with LSU Sensor and Loom	15003
PLM Professional Lambda Meter with NTK Sensor and Loom	15002
PLM Professional Lambda Meter with LSU 4.9 Sensor and Loom	15005
PLM Professional Lambda Meter only	15004
Standard 2.6m PLM Loom (available individually as a spare)	61038
PLM NTK Adaptor Loom	61105
PLM Bosch LSU 4.9 Adaptor Loom	61118

Lambda Sensors and Accessories

LAMBDA SENSORS AND ACCESSORIES	PART NO.
Bosch Wide Band Lambda Sensor (LS11 for M4/M48/M8)	57001
Bosch LSU 4.0 Lambda Sensor (for M800 series and PLM)	57003
Bosch LSU 4.9 Lambda Sensor (for M800 series, PLM, LTC)	57006
NTK Lambda Sensor (for M800 series and PLM)	57007
Stainless Steel Weld-on Boss Including Bung	59002
Bosch LSU 4.0 Connector (discontinued—limited stock)	64006
Bosch LSU 4.9 Connector	64010
M800 OEM Lambda Adaptor (300mm from OEM to DTM plug)	61044
M800 OEM LSU 4.0 Adaptor (3m from DTM to LSU 4.0 plug)	61050
M800 OEM LSU 4.9 Adaptor (2m from DTM to LSU 4.9 plug)	61051



IGNITION SYSTEM COMPONENTS

CDI - Capacitive Discharge Ignition

The CDI/4 can be used as an ignition driver from an ECU to drive up to 4 individual high energy CDI coils. Mating connector included.

The CDI/8 can be used as an ignition driver from an ECU to drive up to 8 individual high energy CDI coils or can be used with external sensors as a stand-alone system. As a stand-alone unit it can be programmed from a PC running on its own dedicated sensors.

Mating connector available separately.



CDI	PART NO.
MoTeC CDI/4 (for use with an ECU)	41003
MoTeC CDI/8	14004
26 Pin Autosport CDI/8 Connector (AS616-26SN)	68086
1000Hz Single Channel CDI Module (for use with an ECU)	41013
650Hz Dual Channel CDI Module (for use with an ECU)	41005

Ignition Coils and Amplifiers

IGNITION COILS	PART NO.
Single Coil	42001
Denso Single Coil (built-in amplifier, includes connector)	42012
Bosch Single Coil	42014
Bosch 4 Cylinder Coil Pack (wasted spark)	42025
CDI Coil (PS92)	42020
CDI Coil (wasted spark)	42021
Bosch 6 Cylinder Coil Pack (wasted spark)	42022
Single Mercury CDI Coil	42011
Single CDI Coil	42030
Bosch HT Coil Connections	46001
Bosch HT Coil Covers	46002



IGNITION AMPLIFIERS	PART NO.
IGN4 - Compact Quad Channel Ignition Amplifier (contact us before ordering)	41212
Single Channel Ignition Amplifier	41124
Single Channel Ignition Amplifier (with tach. output)	41008
Dual Channel Ignition Amplifier	41200
Triple Channel Ignition Amplifier	41203
Triple Channel Ignition Amplifier (dual connector)	41205
Quad Channel Ignition Amplifier (dual connector)	41204
Ignition Combiner (provides a tach. output, refer to MoTeC drawing A10)	53110



COMMUNICATIONS CABLES

CAN Communications

CAN is used for laptop communications with M400/M600/M800/M880, SDC1/SDC2/MDC, old-style ADL8, BR2, and the new PDM16 and PDM32. The CAN cable connects to a PC parallel port, whereas the UTC allows CAN communication via a USB port. Provides conversion of serial data to CAN format, allowing serial devices to be connected to an SDL/ADL2/ADL3/ACL.

CAN COMMUNICATIONS	PART NO.
UTC USB to CAN Converter	61059
CAN Communications Cable	61021
CAN Cable and UTC Loom Connector (in line)	65038
CAN Cable and UTC Loom Connector (panel mount)	65030
CAR Cable (vehicle loom CAN interface)	61022
M800 OEM CAN Adaptor (also for SDC1/SDC2/SDC3)	61046
STC Serial to CAN Converter	61125



USB Communications

USB is used for laptop communications with the SDL and ADL2/EDL2.

USB COMMUNICATIONS	PART NO.
USB Cable Terminated in Autosport Sockets (1m)	61067
USB Cable Terminated in Autosport Sockets (1.8m)	61068
2m USB Cable	79140
USB Bulkhead Connector and Cap	90100



Ethernet Communications

Ethernet is used for laptop communications with ADL3, EDL3, SDL3, ESDL3 and ACL. We now supply a Bulkhead Ethernet cable terminated with Autosport sockets.

ETHERNET COMMUNICATIONS	PART NO.
ACL Ethernet Communications Cable	61112
Ethernet RJ45 Bulkhead to Autosport Sockets 1.8M	61132
NOTE: You will also need a standard RJ45 cable	



Serial Communications

A serial connection is used for laptop communications with M4, M48, M8 ECUs, and the PLM.

SERIAL COMMUNICATIONS	PART NO.
2m PCI Cable (M48, M8 and early M4)	63003
6m PCI Cable (M48, M8 and early M4)	63004
RS232 Comms Cable (M4e and PLM)	61070
CIM Kit (ECU to SDL/ADL/ADL2 Interface for M4, M48, M8)	61027
D9 Adaptor (for use with PCI cable on M4 < 3000, M48, M8)	61010
D9 - 232 Adaptor (M4 only)	61016
D9 Adaptor (Mitsubishi/Subaru for M48 OEM conversion)	61012/3
D9 Mil Spec Adaptor (for mil spec M4, M48, and M8 ECU)	61011
USB to Serial Adaptor	90099



SENSORS

Speed Sensors

Speed sensors are used to measure cam and crank position, or wheel speed. Hall Effect sensors provide an open collector output, suitable for REF/SYNC and digital inputs on ECUs, and digital or speed inputs on Dash Loggers. Inductive sensors output a voltage waveform due to a changing magnetic field, and are suitable for use on REF/SYNC inputs on ECUs, and speed inputs on Dash Loggers.

HALL EFFECT SENSORS	PART NO.
GT101 (19mm plastic body)	57101
Threaded Hall Probe (M12x1, 36mm stainless steel body)	57111
Inductive Probe (7/16 x 20tpi threaded steel body) Requires Magnet below PN 57115	57114
Magnet for Sensor 57114	57115
INDUCTIVE SENSORS	PART NO.
Magneti Marelli SEN 8D Sensor	57104
MAGNETIC TO HALL SPEED SENSOR CONVERSION	PART NO.
The DMC-D converts signals from two magnetic speed sensors into 'Hall Effect' signals, suitable for digital inputs. The DMC-D is housed in a 12-way DTM male connector, so requires a 12-way DTM female connector (not supplied) for a wiring loom interface.	
DMC-D Dual Magnetic Converter	53118
12 Way Female DTM Connector Kit for DMC-D	68060



Manifold Pressure Sensors (Absolute)

MANIFOLD PRESSURE SENSORS (ABSOLUTE)	PART NO.
1bar High Accuracy Delco MAP Sensor (connector supplied)	53000
1bar Delco MAP Sensor (connector supplied)	53001
3bar Delco MAP Sensor (connector supplied)	53003
4bar Standard Sensor (integral connector, with mating half) - features a 3/8"UNF (-03) fitting.	58060
4bar Professional Sensor (flylead connection) - features a 3/8"UNF (-03) fitting.	58040



SENSORS

Temperature Sensors

VARIABLE RESISTANCE	PART NO.
Delco Air Temperature (3/8 NPT)	54001
Bosch Air Temperature (M12x1.5)	54002
Air Temperature with Fly Lead (M10x1)	54003
Air Temperature with Fly Lead (M12x1.5)	54005
Bosch -40 to 150°C Fluid Temperature (M12x1.5)	55002
Bosch -40 to 150°C Fluid Temperature (M10x1)	55003
-30 to 150°C Fluid Temperature with Fly Lead (M12x1.5)	55005
-30 to 150°C Fluid Temperature with Fly Lead (M10x1)	55004
Delco Air Temperature Sensor Connector Kit	64001
Bosch 2 Pin Female Connector Kit	65008
THERMOCOUPLES	PART NO.
K type thermocouples are often used to measure exhaust temp. If used with an ECU or Dash Logger, an Amplifier is required. If used with an E888 or SVIM, the amplifier is not required.	
MoTeC Thermocouple Amplifier	58008
K type Thermocouple Kit (150mm probe length)	58005
K type Thermocouple Kit (75mm probe length)	58009
1/8NPT Thermocouple Stainless Steel Fitting and Gland Nut	58012
K type Sensor Female Socket	58017
K type Sensor Male Plug	65048
NON-CONTACT INFRA RED	PART NO.
Infra Red sensors allow non-contact temperature measurement, and are used for tyre or brake temperature monitoring.	
0 – 150°C Infra Red Sensor (aluminium body)	52009
0 – 1200°C Infra Red Sensor (best for carbon brakes)	52005
0 – 1000°C Infra Red Sensor (best for steel brakes)	52006



Fluid Pressure Sensors (Gauge)

5 and 10 bar sensors are for Fuel and Oil Pressure, with 170 bar sensors used for Brake Pressure.

BASIC VDO SENSORS - 1/8"NPT FITTING	PART NO.
5bar VDO Sensor (screw terminals)	58002
10bar VDO Sensor (screw terminals)	58003
STANDARD SENSORS - 3/8"NPT (-03) FITTING	PART NO.
10bar Standard Sensor (integral connector, with mating half)	58061
170bar Standard Sensor (integral connector, with mating half)	58062
PROFESSIONAL SENSORS - 3/8"NPT (-03) FITTING	PART NO.
5bar Professional Sensor (flylead connection)	58041
10bar Professional Sensor (flylead connection)	58042
100bar Professional Sensor (flylead connection)	58044
170bar Professional Sensor (flylead connection)	58043



SENSORS

Motion Sensors

MOTION SENSORS	PART NO.
±4G Single Axis G Sensor (ECU)	57202
±4G Triple Axis G Sensor (ECU)	57203
±4G Single Axis G Sensor (ADL2)	57205
±4G Triple Axis G Sensor (ADL2)	57206
100°/s Single Axis Gyro	79130
150°/s Single Axis Gyro	79131



Rotary Position Sensors

ROTARY POSITION SENSORS	PART NO.
Standard D-drive Throttle Position Sensor (right hand, black)	56001
Standard D-drive Throttle Position Sensor (left hand, white)	56002
100° Sprung Shaft Potentiometer	59008
350° Sprung Shaft Potentiometer	59013
Multi Turn Steering Angle Kit (10 turn pot, 2 gears, and belt)	59006



Strain Gauges

Gearshift load cells are used for flat shift functions, and we can supply kits for sequential or H-pattern gearboxes providing an amplified 0-5V output. We can also supply amplifiers for existing strain gauges. Note that strain gauge products are made to order so are subject to a lead time.

STRAIN GAUGES	PART NO.
Sequential Gearshift Load Cell Kit	95004
H-Pattern Gearshift Load Cell Kit	95005
Strain Gauge Amplifier	95007
Motorcycle Quickshift Loadcell	79104



Linear Position Sensors

LINEAR POSITION SENSORS	PART NO.
50mm Linear Potentiometer	57152
75mm Linear Potentiometer	57153
100mm Linear Potentiometer	57156
150mm Linear Potentiometer	57155
200mm Linear Potentiometer	57158
75mm Slimline Linear Pot (Pop Joint) - Rear Suspension	79160
150mm Slimline Linear Pot (Pop Joint) - Front Suspension	79161
Rose Joint End for Slimline Potentiometers	79162



WIRING AND CONNECTORS

Wiring Looms

ADAPTOR LOOMS

If you require an adaptor loom as an interface between any of our M4/M48 or M84/M400/M600/M800/M880 ECUs and a particular vehicle we have most of the requisite circuit pin out drawings and components in stock.

Once we know the details of your vehicle and specific requirements we can recommend a choice of authorised specialist wiring manufacturers from within our dealer network who would be able to quote for and supply an adaptor loom to suit your application.

UNTERMINATED LOOMS	PART NO.
M4 Cut-to-Fit Loom (2.5m unterminated)	61001
M48 Cut-to-Fit Loom (2.5m unterminated)	61002
M8 Cut-to-Fit Loom (2.5m unterminated)	61003
M400, M600, M800 and M84 Cut-to-Fit Loom (2.5m unterminated)	61004
M880 Cut-to-Fit Loom (2.5m unterminated)	61005
ADL Cut-to-Fit Loom (3m unterminated)	61020
ADL2 Cut-to-Fit Loom with USB (3m unterminated)	61099
ADL3 Cut-to-Fit Loom (3m unterminated)	61213
SDL Cut-to-Fit Loom (3m unterminated)	61023
SDL3 Cut-to-Fit Loom (3m unterminated)	62202



ECU Connectors

ECU CONNECTORS	PART NO.
36 Way MoTeC M4/M48/M8 Connector	65036
18 Way MoTeC M8/LEX/TCMux/CDI/4 Connector	65018
34 Way MoTeC M400/M600/M800/E888 Connector (used on C125)	65044
26 Way MoTeC M400/M600/M800/E888 Connector	65045
M800 Series Connector Kit	95560
Mitsubishi/Subaru ECU Connectors (12, 16, 22 and 26 way)	69011,2,3,4
ECU CONNECTOR SPARES AND ACCESSORIES	PART NO.
36way MoTeC connector aluminum boot	79133
26 way MoTeC Connector aluminum boot	79132
M800 Spares Pins (each)	65546
M4/M48/M8/LEX/TCM Spare Pins (each)	65024
Seals for M4/M48/M8/LEX/TCMux Pins (each)	65025



WIRING AND CONNECTORS

All kits contain shell, contacts, and seals. Male/Female descriptions refer to the pin type, not the connector or housing shape.

Military Connectors

MILITARY CONNECTORS	PART NO.
55 Way M8 Mil Spec ECU Connector	68078
32 Pin M4/M48 Mil Spec ECU Connector	68079
10 Pin to D9 Comms Plug Connector (M8, mil spec M4/M48)	68077

Autosport AS Connectors

AUTOSPORT (AS) CONNECTORS	PART NO.
13 way Autosport GPS Connector (AS610-35SA)	68010
79 way Autosport ADL2 Connector (AS620-35SN) (ADL3, C185, C187)	68080
26 way Autosport PDM/CDI8 Connector (AS616-26SN)	68086
22 way Autosport ACL/TCMux/IEX Connector (AS612-35SN)	68087
8 way Autosport PDM16/32 Connector (AS616-08SN)	68088
66 way Autosport M880/E816/DBW4 Connector (AS618-35SN)	68089
55 way Autosport VIM Sensor Connector (AS616-35SN)	68090
37 way Autosport SDL/PDM Connector (AS614-35SN)	68100
AS Connector Sockets for MoTeC Product Connectors (each)	68082
AS Connector Filler Plugs (each)	68083
AUTOSPORT ASL CONNECTORS	PART NO.
5 way ASL BR2/VIM Connector (ASL606-05SN)	68098
5 way Female ASL Connector (ASL106-05SN)	68102
5 way Male ASL Connector (ASL606-05PN)	68103
5 way ASL Ethernet Loom Connector (ASL106-05PN)	79102
5 way Flanged ASL Ethernet Loom Connector(ASL006-05PN)	79103
ASL Connector Sockets (each)	68068
ASL Connector Pins (each)	68069
AUTOSPORT ASU CONNECTORS	PART NO.
3 way Female Autosport (ASU103-03SN)	65120
3 way Male Autosport (ASU603-03PN)	65121
ASU Connector Pins (each)	68074
ASU Connector Sockets (each)	68075



Pressure Sensor Connectors

PRESSURE SENSOR CONNECTORS	PART NO.
Delco 1 Bar MAP Sensor Connector	64002
Delco 3 Bar MAP Sensor Connector	64003
Standard Pressure Sensor Spare Connector	65013



WIRING AND CONNECTORS

Bosch Connectors

BOSCH CONNECTORS	PART NO.
2 Way Male Kit	65007
2 Way Female Kit	65008
3 Way Female Kit	65012
4 Way Female Kit	65140
5 Way Female Kit	65142
6 Way Female Kit	65144
7 Way Female Kit	65010



DTM Connectors

DTM CONNECTORS	PART NO.
2 Way Female Kit	68050
2 Way Male Kit	68051
3 Way Female Kit	68052
3 Way Male Kit	68053
4 Way Female Kit	68054
4 Way Male Kit	68055
6 Way Female Kit	68056
6 Way Male Kit	68057
8 Way Female Kit	68058
8 Way Male Kit	68059
12 Way Female Kit	68060
12 Way Male Kit	68061



DTP Connectors (for DHB)

DTP CONNECTORS	PART NO.
2 Way Female Kit	79125
2 Way Male Kit	79121



AMP Connectors

AMP CONNECTORS	PART NO.
1 Way Female Kit	65216
1 Way Male Kit	65215
2 Way Female Kit	65201
2 Way Male Kit	65200
3 Way Female Kit	65203
3 Way Male Kit	65202
4 Way Female Kit	65205
4 Way Male Kit	65204
5 Way Female Kit	65207
5 Way Male Kit	65206
6 Way Female Kit	65209
6 Way Male Kit	65208



WIRING AND CONNECTORS

Cable

RAYCHEM TYPE 44 CABLE - PER METRE	22G PART NO.	20G PART NO.
Black	90111	69999
White	90101	70004
Yellow	90102	70005
Green	90103	70007
Red	90104	70000
Blue	90105	70006
Pink	90106	70010
Brown	90107	70008
Orange	90108	70009
Grey	90109	70011
Violet	90110	70012
SPECIAL CABLE - PER METRE	PART NO.	
3 Core Cable (22g with PTFE sleeving)	81003	
High Temperature Ethernet Cable (for PC Comms)	79350	



Protective Sleeving

Heat sleeving to protect wiring from extremes of temperature near exhausts or turbos, providing continuous protection up to 200°C, and able to withstand momentary peaks of 350°C.

PROTECTIVE SLEEVING - PER METRE	PART NO.
5mm diameter Heat Sleeving	92100
10mm diameter Heat Sleeving	92101

Heatshrink

HEATSHRINK - PER METRE	PART NO.
3.2mm diameter	62003
4.8mm diameter	62004
6.4mm diameter	62005
9.5mm diameter	62006
12.7mm diameter	62007
19.0mm diameter	62008
ADHESIVE-LINED HEATSHRINK - PER METRE	PART NO.
3.2mm diameter	62020
6.4mm diameter	62022
12.7mm diameter	62024
19.0mm diameter	62025



WIRING AND CONNECTORS

Heatshrink

RAYCHEM DR25 HEATSHRINK - PER METRE	PART NO.
1/8" diameter (3.2mm)	92003
3/16" diameter (4.8mm)	92004
1/4" diameter (6.4mm)	92005
1/2" diameter (12.7mm)	92006
3/4" diameter (19.0mm)	92007
RAYCHEM HEATSHRINK BOOTS FOR MOTEC PRODUCTS	PART NO.
202K163-25 Boot (ADL2)	65108
202K153-25 Boot (M880, E816, DBW4, VIM)	65109
202K142-25 Boot (SDL, ACL, IEX, TCM)	65110
202K121-25 Heatshrink Boot with Retention Lip	65100
222K163-25 90 deg Boot (ADL2)	65111
222K152-25 90 deg Boot (M880, E816, DBW4, VIM)	65112
222K142-25 90 deg Boot (SDL, ACL, IEX, TCM)	65113
222K121-25 90 deg Heatshrink Boot	65114
HEATSHRINK BOOTS FOR SENSORS	PART NO.
202A111-25 Boot for ASL Connector	65105
202A111-25/225 Pre-glued Boot for ASL Connector	65106
202A121-25 Heatshrink Boot	65107
222A111-25 90 deg Boot for ASL Connector	65115
Hellermann 1030-4-G Boot for ASL Connector	65122
Hellermann 1030-4-GW24 Pre-glued Boot for ASL Connector	65116
Hellermann 1181-4-G 90 deg Boot for ASL Connector	65117
204W221-25 Boot for ASU Connector	65118
204W221-25/225 Pre-glued Boot for ASU Connector	65101
224W221-25 90 deg Boot for ASU Connector	65119



Wiring Tools

WIRING TOOLS	PART NO.
MoTeC Military Crimp Tool (fits all MoTeC mil type pins)	68073
Packard Crimp Tool	67022
M800 Crimp Tool	67024
DE-PINNING	PART NO.
Autosport 22g De-Pinning Tool (plastic)	90003
Autosport 20g De-Pinning Tool (plastic)	90005
Autosport 16g De-Pinning Tool (plastic)	90006
Delco De-Pinning Tool (metal)	68001



ACCESSORIES

Buttons and Switches

BUTTONS AND SWITCHES	PART NO.
Illuminated 12mm Momentary Button	67100
Illuminated 12mm Latching Button	67101
Illuminated 8mm Momentary Button	67102
Illuminated 8mm Latching Button	67103
Lenses for 12mm Button (blue, green, red, yellow)	67506/7/8/9
Lenses for 8mm Button (green, red, yellow)	67513/4/5
Lamps and LEDs for 12mm and 8mm Buttons	67501
19mm Push Buttons (blue, green, red, yellow)	67111/2/3/4
Miniature Toggle Switch (DPDT)	67201
Miniature Toggle Switch (SPDT)	67203
10 Position Resistive Rotary Switch	56100
Gear Cut Roller Micro Switch	67115
2009 Yamaha R1 Gear Position Adaptor (includes mating half)	79120

Handlebar Switch Gear

For functions such as pit speed limiter, ECU map select and traction control on/off and up/down trim.

HANDLEBAR SWITCH GEAR	PART NO.
Motorcycle Handlebar Switch Gear	79105



SLM - Shift Light Module

The SLM Shift Light Module features eight full-colour (RGB) LEDs. The lights can be used for shift lights, warning lights, or other indicators. Each LED is fully independent as to the purpose, colour, and brightness. The SLM works via CAN in conjunction with all MoTeC ECUs, displays and loggers. An uncased OEM version is available for integration into your own steering wheel design.

SLM	PART NO.
SLM Shift Light Module	18120
SLM OEM (uncased SLM for steering wheel integration)	18121
SLM-C Club Shift Light Module (pre-defined shift pattern)	18122
SLM Mating Connector (DTM 4-Way Female)	68054



Shift/Warning LEDs

SHIFT/WARNING LEDs	PART NO.
7mm Panel Light (blue, green, red, yellow)	67520/1/2/3
10mm Panel Light (green, red, yellow)	67540/1/2
10mm Panel Light (tri-colour)	67543
Multi-Coloured LED Array (low cost alternative to SLM)	68007



TRAINING AND SUPPORT SERVICES



Technical Field Support

In addition to telephone support, MoTeC regularly supplies Technical Support Engineers for Track Support or on-site Tuning and Training. Contact us to enquire about booking a MoTeC Technical Support Engineer for assistance with set up and configuration of MoTeC products and systems.

TECHNICAL FIELD SUPPORT	DURATION
MoTeC Field Support in the UK (exclusive of expenses)	1 Day
MoTeC Field Support in Europe (exclusive of expenses)	1 Day
MoTeC Field Support in R.O.W. (exclusive of expenses)	1 Day

REPAIRS, TESTING AND UPGRADES

If any of your MoTeC products require testing or repair, or require upgrade, please contact us to obtain a Return Material Authorisation (RMA) number. Repair costs for your unit depend on individual circumstances.

TESTING	PART NO.
MoTeC Hardware Testing	
Sensor Testing and Calibration (please contact us)	
SDL UPGRADES	PART NO.
SDL Logging enable (enables 8MB logging memory)	29214
Pro Logging Advanced Analysis	29220
ADL2 UPGRADES	PART NO.
16MB Logging Memory (upgrade from 8MB to 16MB)	29115
Extension to 50 Input/outputs	29101
Pro Logging Advanced Analysis	29120
Telemetry Support	29121
Remote Logging (requires telemetry upgrade)	29122
Lambda Measurement Support	29102
UPGRADES	PART NO.
ADL2 Backlight Conversion - Upgrade ADL2 to Backlit	
SDL Backlight Conversion - Upgrade SDL to Backlit	
Replace Screen on ADL2 or SDL	
Replace Backlight	
MDD or PLM Firmware Upgrade	
ILLUMINATION	PART NO.
ADL2 Voltage Inverter (for backlit ADL2 only)	61035
Dimmer Switch For Backlit SDL, ADL2, ADL3	61036

WHERE TO FIND US

Directions

- Leave the M40 at J10 and follow signs for the A43 north
- Turn left at the Esso garage roundabout onto the B4100
- Follow for 7 miles into Adderbury
- At the traffic lights turn left, continue past the Red Lion pub
- Take the second left outside the village sign posted Twyford Mill (Fired Earth site)

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