



C125 COLOR DISPLAY LOGGER



The C125 comes standard as a combined full color display and powerful control device that is readable in direct sunlight. With the addition of the Data Logging upgrade it becomes a fully programmable data logger with 120 MB memory.

Displayed channels and labels are configurable on supplied layouts. The C125 acquires data from devices such as an ECU and displays data channels, warning alarms, lap times, fuel calculations, minimum corner speeds, maximum straight speeds and much more.

► FEATURES

- High resolution 125 mm (5" approx) color LCD display
- High brightness for sunlight readability
- 10 full color (RGB) LEDs; color, function and intensity are fully programmable
- Suitable for bikes, cars, marine and industrial applications
- Supports Wideband Lambda from MoTeC PLMs or LTCs
- Easily integrates with MoTeC CAN based products such as ECUs and expanders. Full I/O expansion available with use of E888 and E816 expanders.
- GPS Lap Timing

Optional upgrades:

- C125 I/O
- C125 120MB LOGGING
- C125 PRO ANALYSIS

► SPECIFICATIONS

Display

Type: Color TFT LCD, anti-reflective

Resolution: 800 x 480, anti-aliased graphics

Layouts: selectable fixed layouts, user programmable layouts available in future releases.

48 user-defined, scrollable message lines with programmable overrides

3 programmable modes with customisable labels

Logging - optional (requires logging upgrade)

120 MB logging memory

Logging rates up to 500 samples per second

Fast Ethernet download

Includes i2 Standard (Pro Analysis upgrade available)

Inputs - optional (requires I/O upgrade)

6 Analog voltage inputs:

– 4 x 0 to 5.46 V

– 2 x 0 to 15.0 V

2 Analog temperature inputs

2 Digital inputs

3 Speed inputs

Compatible with E888 and E816 expanders, and providing full functional use

Outputs - optional (requires I/O upgrade)

4 low side outputs PWM or switched operation

Internal Sensors

3-axis G sensor

Dash temperature sensor

Sensor supply voltage

Battery voltage

Communications

2 configurable CAN buses, with individually programmable CAN bus speeds. One can be used as RS232 Receive.

2 RS232 ports, one with transmit and receive, one with receive only

Operating temperature

Internal: -20 °C to 70 °C (above 60 °C maximum backlight brightness progressively reduced)

Typical maximum ambient temperature in free air: 55 °C

Typical minimum ambient temperature in free air: -20 °C

Physical

Size: 134.5 x 103.9 x 20.2 mm excluding connector

Weight 360 g

1 x 34 pin waterproof connector

COMPATIBILITY

MoTeC ECUs: M4*, M48*, M8*, M84, M400, M600, M800, M880

MoTeC Accessories: E816, E888, SLM, PLM, LTC, BR2, PDM, GPS, VCS etc.

Many non-MoTeC devices

*For some ECUs, an additional cable/adaptor may be required in conjunction with the RS232 adapter.

SOFTWARE

Windows-based software designed for setup and management of the display and data logging system, that provides:

- Configuration of the inputs, outputs, LEDs, display, data logging and calculations
- Offline generation of a configuration file that can then be sent to the C125
- Channel monitoring
- Firmware updating
- Extensive help screens

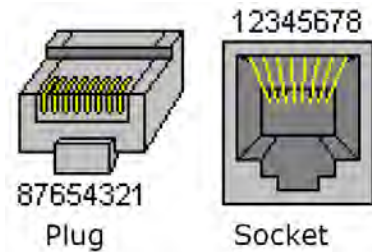
WIRING

Ethernet Wiring

Ethernet Connector		MoTeC Loom Color	C125	
Pin	Function		Pin	Function
1	ethernet TX +	orange/white	11	ethernet RX +
2	ethernet TX -	orange	10	ethernet RX -
3	ethernet RX +	green/white	2	ethernet TX +
6	ethernet RX -	green	1	ethernet TX -

⇒ The wiring specified is the preferred cross-over configuration. However, the wiring can also be configured as straight-through.

Pin Numbering

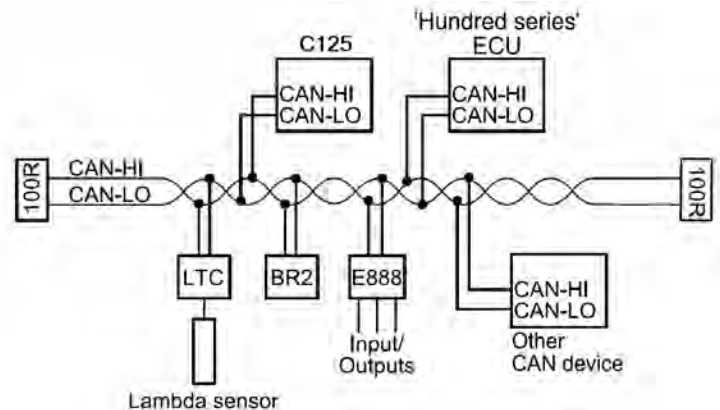


Cat 5 Ethernet cable must be used.

ECU Wiring

When using an M4, M48 or M8 ECU, the C125 should be connected via RS232. For some ECUs, a PCI cable may also be required.

The C125 should be connected via the CAN bus when using a 'hundred series' ECU M84/ M400/M600/M800/M880 and any number of other CAN devices. See the following example.



Detailed wiring information is available in the user manual at www.motec.com/downloads.

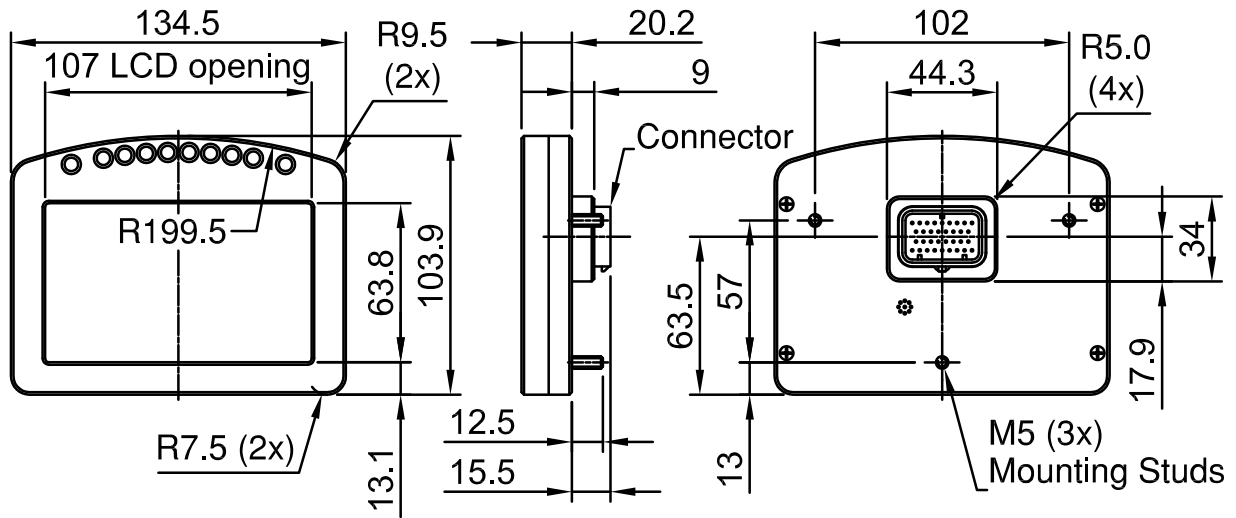
▶ PINOUT

Mating Connector: AMP 4-1437290-0

Pin	Name	Standard Function	Optional Function
1	E-TX-	Ethernet Transmit -	
2	E-TX+	Ethernet Transmit +	
3	AV1		Analogue Voltage Input 1
4	AV2		Analogue Voltage Input 2
5	AV3		Analogue Voltage Input 3
6	AV4		Analogue Voltage Input 4
7	8V	Sensor 8 V	
8	5V	Sensor 5 V	
9	0V	Sensor 0 V	
10	E-RX-	Ethernet Receive -	
11	E-RX+	Ethernet Receive +	
12	AV5		Analogue Voltage Input 5
13	AV6		Analogue Voltage Input 6
14	DIG1	Alarm Ack	Digital Input 1
15	DIG2	Next Line	Digital Input 2
16	AT1		Analogue Temp Input 1
17	AT2		Analogue Temp Input 2
18	CAN1L	CAN1 Lo	
19	CAN1H	CAN1 Hi	
20	RS232-1 TX	RS232-1 Transmit Output	
21	SPD1		Speed Input 1
22	SPD2		Speed Input 2
23	SPD3	Brightness Switch	Speed Input 3
24	Not used	Not used	Not used
25	RS232-2 RX	RS232-2 Receive Input	
26	CAN2L	CAN2 Lo / RS232 Ground Input	
27	CAN2H	CAN2 Hi / RS232 Receive Input	
28	RS232-1 RX	RS232-1 Receive Input	
29	AUX1		Auxiliary Output 1
30	AUX2		Auxiliary Output 2
31	AUX3		Auxiliary Output 3
32	AUX4		Auxiliary Output 4
33	BAT+	Battery Positive	
34	BAT-	Battery Negative	

► DIMENSIONS AND MOUNTING

Measurements in mm.



⇒ **Note:** Do not remove any part of the casing. The case provides electromagnetic screening to avoid interference with other equipment, and is also essential for thermal management. Thermal management may be compromised if mounted in a confined space, refer to the operating temperature specifications.

Ensure product is not stressed when mounted.