





## Lambda To CAN (LTC)

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 an ECU or logging device to simultaneously monitor numerous Lambda sensors.

#### NOTE: MoTeC's LTC is also available in a dual version, LTCD

#### Sensors compatibility Bosch LSU 4.9, 5 wire sensor Inputs/Outputs 1 x Bosch LSU 4.9 Lambda sensor Power supply voltage 11 V – 16 V Power supply current 110 mA typical plus the sensor heater current (heater current is typically 0.5 A – 1 A and up to 2 A on startup) Communications 1 x CAN at 1 Mbit/sec **Connectors** 1 x 4 pin male DTM connector (power/CAN) 1 x mating connector for Bosch LSU 4.9 sensor **Physical** Dimensions 38 x 26 x 14 mm excluding wiring looms and connectors Weight 62 grams Maximum ambient temperature 100 °C General Provides accurate Lambda measurement even when exhaust gas temperature is changing rapidly (heating or cooling) Calibrated by the user for a particular sensor using either the initial sensor factory calibration or a free air calibration Install as a single unit or in multiples Pre-configured to suit a single LTC unit installation Cost effective **Measurement/Configuration** Compatible fuel: gasoline/petrol alcohol LPG diesel user defined 'blend' fuel Comprehensive diagnostic and status channels

automatic, using the sensor's built-in calibration resistor

Configurable to compensate for sensor aging and



Web	Item Number	Description
(i)	M LTC	LAMBDA TO CAN

Calibration methods:

contamination Accuracy +/- 1.5% Operating range: Lambda 0.65 to 10

known oxygen environment Standard configuration tables

AFR 9.5 to 147 for gasoline/petrol



## Lambda To CAN Dual (LTCD)

MoTeC's LTCD (Lambda to CAN Dual) modules monitor, control and diagnose Bosch LSU 4.9 Lambda sensors, transmitting readings on a CAN bus. When multiple LTCDs are used, up to 32 Lambda sensors can be configured on a single CAN bus, allowing an ECU or logging device to simultaneously monitor numerous Lambda sensors.

#### NOTE: MoTeC's LTCD is also available in a singular version, LTC

#### Sensors compatibility

Bosch LSU 4.9, 5 wire sensor

#### Inputs/Outputs

1 x Bosch LSU 4.9 Lambda sensor

Power supply voltage 11 V – 16 V

Power supply current 110 mA typical plus the sensor heater current (heater current is typically 0.5 A – 1 A and up to 2 A on startup)

#### Communications

1 x CAN at 1 Mbit/sec

#### Connectors

1 x 4 pin male DTM connector (power/CAN) 2 x mating connector for Bosch LSU 4.9 sensor

#### Physical

Dimensions 38 x 26 x 23.5 mm excluding wiring looms and connectors Weight 100 grams Maximum ambient temperature 100 °C

#### General

Provides accurate Lambda measurement even when exhaust gas temperature is changing rapidly (heating or cooling)

Calibrated by the user for a particular sensor using either the initial sensor factory calibration or a free air calibration Install as a single unit or in multiples Pre-configured to suit a single LTCD unit installation

### Cost effective

Measurement/Configuration Compatible fuel: gasoline/petrol alcohol LPG diesel user defined 'blend' fuel Comprehensive diagnostic and status channels Calibration methods: automatic, using the sensor's built-in calibration resistor known oxygen environment Standard configuration tables Configurable to compensate for sensor aging and contamination Accuracy +/- 1.5%

#### **Operating range:**

Lambda 0.65 to 10 AFR 9.5 to 147 for gasoline/petrol



Web	Item Number	Description
(i)	M LTCD	LAMBDA TO CAN DUAL





## Lambda To CAN (LTC NTK)

MoTeC's LTC NTK (Lambda to CAN) modules monitor, control and diagnose NTK Lambda sensors, transmitting readings on a CAN bus. When multiple LTC NTKs are used, up to 32 Lambda sensors can be configured on a single CAN bus, allowing an ECU or logging device to simultaneously monitor numerous Lambda sensors.

#### NOTE: MoTeC's LTC NTK is also available in a dual version, LTCD NTK

#### Sensors compatibility

NTK, 5 wire sensor

#### Inputs/Outputs

1 x NTK Lambda sensor (MoTeC #57007)

Power supply voltage 11 V - 16 V

Power supply current 110 mA typical plus the sensor heater current (heater current is typically 0.5 A - 1 A and up to 2 A on startup)

### Communications

1 x CAN at 1 Mbit/sec

#### Connectors

1 x 4 pin male DTM connector (power/CAN) 1 x mating connector for NTK Lambda sensor

#### **Physical**

Dimensions 38 x 26 x 14 mm excluding wiring looms and connectors

Weight 62 grams

Maximum ambient temperature 100 °C

#### General

Provides accurate Lambda measurement even when exhaust gas temperature is changing rapidly (heating or cooling)

Calibrated by the user for a particular sensor using either the initial sensor factory calibration or a free air calibration Install as a single unit or in multiples Pre-configured to suit a single LTC NTK unit installation Cost effective

## Measurement/Configuration

Compatible fuel: gasoline/petrol alcohol LPG diesel user defined 'blend' fuel Comprehensive diagnostic and status channels Calibration methods: automatic, using the sensor's built-in calibration resistor known oxygen environment Standard configuration tables Configurable to compensate for sensor aging and contamination Accuracy +/- 1.5%

#### **Operating range:**

Lambda 0.65 to 10 AFR 9.5 to 147 for gasoline/petrol



Web	Item Number	Description
	M LTC NTK	LAMBDA TO CAN NTK



## Lambda To CAN Dual (LTCD NTK)

MoTeC's LTC NTK (Lambda to CAN) modules monitor, control and diagnose NTK Lambda sensors, transmitting readings on a CAN bus. When multiple LTC NTKs are used, up to 32 Lambda sensors can be configured on a single CAN bus, allowing an ECU or logging device to simultaneously monitor numerous Lambda sensors.

NOTE: MoTeC's LTC NTK is also available in a dual version, LTCD NTK

## Sensors compatibility

## NTK, 5 wire sensor

Inputs/Outputs

2 x NTK Lambda sensors (MoTeC #57007) Power supply voltage 11 V – 16 V

Power supply voltage 11 v = 10

Power supply current 110 mA typical plus the sensor heater current (heater current is typically 0.5 A – 1 A and up to 2 A on startup)

#### Communications 1 x CAN at 1 Mbit/sec

### Connectors

1 x 4 pin male DTM connector (power/CAN)

2 x mating connectors for NTK Lambda sensors

#### **Physical**

Dimensions 38 x 26 x 23.5 mm excluding wiring looms and

connectors Weight 100 grams

Maximum ambient temperature 100 °C

#### General

Provides accurate Lambda measurement even when exhaust gas temperature is changing rapidly (heating or cooling)

Calibrated by the user for a particular sensor using either the initial sensor factory calibration or a free air calibration Install as a single unit or in multiples

Pre-configured to suit a single LTCD NTK unit installation Cost effective

## Measurement/Configuration

Compatible fuel: gasoline/petrol alcohol LPG diesel user defined 'blend' fuel Comprehensive diagnostic and status channels Calibration methods: automatic, using the sensor's built-in calibration resistor known oxygen environment Standard configuration tables Configurable to compensate for sensor aging and contamination Accuracy +/- 1.5%

## **Operating range:**

Lambda 0.65 to 10 AFR 9.5 to 147 for gasoline/petrol



Web	Item Number	Description
(i)	M LTCD NTK	LAMBDA TO CAN DUAL NTK



# Professional Lambda Meter (PLM)

The MoTeC Professional Lambda Meter (PLM) determines exhaust gas mixture strength over a wide range of conditions with a fast response time. Quick and easy to use, it allows a calibration engineer all the power and configurability required for OE emissions development and certification work.

MoTeC

The MoTeC PLM provides a differential analog-voltage output that connects to an analog meter or measurement instrument such as data logger or chart recorder. Define output as linear or non-linear in relation to the measured units. The PLM also supports 1mbit CAN and RS232 data links to devices such as the MoTeC dash/logger for transmission of sensor and diagnostic data. Comprehensive diagnostic, status channels are provided for.



The PLM can be used as Lambda input for an ECU!. Instead of purchasing the Lambda Upgrade on M4/M48 - the PLM's definable output voltage can be used as the input for Lambda on these ECU's. This gives you the use of a more state of the art sensor with a digital display which you can place on your dashboard for viewing even if the ECU is offline. Of course you can then use this lambda meter on any other car you wish.

## Specifications:

- Weighs135 gms
- Robust aluminum enclosure
- Operating range 0.70 and 32.0 lambda (for gasoline/petrol this equals air/fuel ratio range of 10.3:1 to 470:1)
- Display lambda, air/fuel ratio, or oxygen percentage for any sensor-compatible fuel
- Define display resolution (in decimal points), update rate, filtering, backlight intensity
- Easy Air calibration using PLM Software (no twisting of screws or watching LED's required)

## M PLM PROFESSIONAL LAMBDA METER

Kits come with Sensor, Harness, Software, O2 Bung, Comm Cable and Users Manual

## **Professional Lambda Meter Accessories**



Web	Item Number	Description
	M PLM CIG	CIGARETTE LIGHTER ADAPTER
(i)	TR-18 PLUG	18MM X 1.5MM THREADED SATAINLESS BUNG W/COPPER WASHER
(i)	TR-18-13	18MM SS RING FOR LSU SENSOR
<b>(</b> ])	TR-18 SS	OXY SENSOR RING 304L STAINLESS
	M PLM EXT	20' PLM EXTENSION CABLE