Lambdatronic LT2 Sport

www.bosch-motorsport.com





- ▶ Measurement of two Bosch LSU 4.9 lambda sensors
- ▶ Lambda measurement range from 0.65 to 15.99
- ► CAN output data stream
- ▶ Voltage and temperature compensation
- ► Automatic sensor heating control

The LT2 Sport provides controlled pumping current to supply up to two Bosch type LSU 4.9 lambda sensors. The lambda value, sensor status and diagnostics are available via CAN. The main features of this unit are the well established lambda measurement technologies of Bosch and attractive sport pricing.

Functions Usage Lambda 0.65 to 15.99 Compatible Bosch sensor type LSU 4.9 Channels 2 Temperature range -40 to 85°C Technical Specifications

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Mechanical Data	
Weight with wire	212 g
Max. vibration	11 ms 30 G peak
Sealing	Splash proof

Electrical Data

Power supply U _S	9.5 to 16.5 V
Average current draw	4 A
Max. current draw	10 A during sensor heat up
Characteristic	
Accuracy in lean gas	± 0.05 lambda
Accuracy in rich gas	± 0.01 lambda
Signal output	CAN
Signal resolution	0.001 lambda
Signal sampling rate	100 Hz
CAN transmit rate	100 Hz
CAN baud rate	250 k, 500 k or 1,000 k
Connectors and Wires	
LT2 Sport mating connector	F 02U V0U 150-01
LSU 4.9 mating connector	D 261 205 356-01
Recommended wire gauge	20 AWG

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Pin Assignment LT2 Sport

Pin	Function
1	12 V supply to heater (VS1)
2	12 V supply to heater (VS2)
3	CAN high (CANH)
4	Nernst voltage (UN2)
5	Pump current (IP2)
6	Nernst voltage (UN1)
7	Pump current (IP2)
8	Heater control (RH2)
9	12 V supply (UBATT)
10	Ground (GND)
11	CAN low (CANL)
12	Virtual ground (VM2)
13	Setup current (IA2)
14	Virtual ground (VM1)
15	Setup current (IA1)
16	Heater control (RH1)

Pin Assignment LSU 4.9

Pin	Function
1	Pump current (IP)
2	Virtual ground (VM)
3	Heater control (RH)
4	12 V supply to heater (VS)
5	Setup current (IA)
6	Nernst voltage (UN)

Twisted wire pairs

Wire 1 Pair	Wire 2 Pair
CAN high (CANH)	CAN low (CANL)
Nernst voltage (UN)	Virtual ground (VM)
Pump current (IP)	Setup current (IA)

Installation Notes

The LT2 Sport must use an LSU $4.9\ sensor;$ all other oxygen sensors are not compatible.

The system can be configured for thee CAN baud rates, correct baud must be configure before installation.

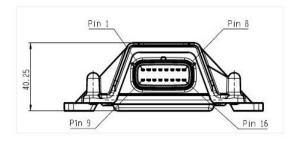
To avoid signal errors, a cable length of maximum 1.5 m between sensor and box is recommended.

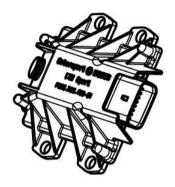
See the LT2 Sport product documentation for complete installation guide, device configuration and CAN protocol.

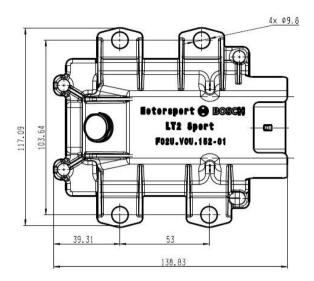
Ordering Information

Lambdatronic LT2 Sport
Order number F 02U V0U 152-01

Dimensions







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