



A-CAN-Dongle-V2

Analog to CAN converter

8 Analog + 2 Digital Inputs

Analog inputs

- range
- resolution 16 bits
- Pull-up
- Accuracy

0 to 5 V or $\pm 10V$ *¹
 0.076 or 0.305 mV/bit
 Internal
 0.5 %FS (-40 to +110°C)
 2 %FS (+110 to +125°C)

Filter (optional) *²

- type
- Cut off frequency

Low pass linear phase 5th order
 Programmable from 15 to 250 Hz

*¹ For $\pm 10V$ input range, filter option is not available

*² If filter option is used:

- the speed inputs are disabled
- pin 11 and 12 must not be connected
- frame Tx3 not sent

Digital inputs

- square wave level
- Pull up to 5V
- Max frequency *³
- Tops

0 to 5 V or NPN open collector
 1 M Ω
 8 KHz
 1 to 100 Tops/rev

*³ Check max frequency for digital inputs as below:
 Ex1: 8000rpm with 48 tops/rev $\rightarrow 8000/60 \times 48 = 6.4$ KHz.
 Ex2: 360km/h with 2m wheel circumference and
 100 tops/rev $\rightarrow 360/3.6 / 2 \times 100 = 5$ KHz.

Wheel Speed *²

- range
- Circumference
- Wheel tops/rev.
- resolution

0 to 500 km/h - 0 to 500 mph
 300 to 5000 rev/mm
 1 to 100 top/rev
 0.01 kmh/bit - 0.01 mph/bit

Engine Revs

- range
- Engine tops/rev.
- resolution

0 to 20000 rpm
 1 to 100 top/rev
 1 Rpm/bit

Analog sampling and speed calculation /channel

CAN bus 2.0 A or B

Output data

Baud rate

Frequency

500 Hz
 120 Ω , not installed (on demand)
 16 bits per channel
 125 k to 1Mbps
 1 Hz to 500 Hz, request mode
 500Hz with baudrate 1Mbps only

Supply voltage

Supply current

6 to 16 V
 35 mA

Dimensions

Material

Weight

48 x 30 x 33 mm
 Aluminum
 45 g

Protection

Vibration test

Operating temp

Storage temp

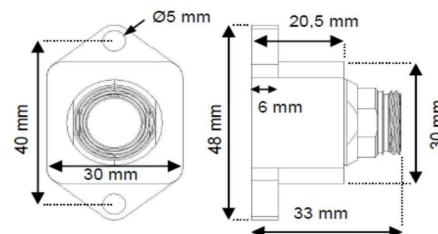
IP67
 20 Gpp 5'
 -40 to +125°C
 -40 to +125°C

Function / Color	Description	Pin
Supply	Supply (6 to 16 V)	1
	GND*	2
Analog Inputs	Channel 1	3
	Channel 2	4
	Channel 3	5
	Channel 4	6
	Channel 5	7
	Channel 6	8
	Channel 7	9
	Channel 8	10
Digital Inputs	Wheel Speed	11
	Engine Speed	12
CAN	CAN HIGH	13
	CAN LOW	14
manufacturer reserved	do not connect	15
Sensor supply	Protected supply (6 to 16 V)	16
	5V	17
	GND*	18
	GND*	19

* Ground pins are internally connected

Standard version:

Connector: LEMO HES.2M.319.XLDP
 Mating connector: LEMO FGS.2M.319.XLM



□ Cable option:

Cable: 19 AWG 28 RW-200-E-3/16

