

CAN Input Expander 2 Model ZE059-2

Introduction:

This evolution of the successful lightweight and compact CAN Input Expander allows a user to take in up to 8 analogue inputs or 8 speed inputs and transmit them out over the vehicle CAN Bus. This allows easy logging of position, temperature, pressure and other parameters. Using the expander allows the vehicle wiring loom to be made much simpler and lighter.

The rugged casing is CNC machined from aluminium billet and connection is through an industry standard autosport connector.

The messages can be converted to any scaled data format and transmitted in any standard or extended ID message. CAN information may also be translated into a different format or message. Speed signals may be read from 2Hz up to 10kHz.

It allows for different length messages and both Intel and Motorola formats in any byte position. It also includes internal temperature and system voltage measurement. Set up is done with bespoke user friendly Shiftec iface software.



Summary:

- Convert analogue (0-5V) signals to CAN data.
- Translate CAN data to new message / format / scaling
- 8 x 12bit A to D inputs
- Speed signal capability on all inputs
- Inputs can be run as either 8 analogue, 8 speed or a combination of both
- 1KHz sampling frequency rate
- User defined CAN transmit and receive
- Scale raw analogue inputs via 2D calibration tables.
- 10 x CAN receive channels available
- 6 x CAN transmit channels available
- User selectable CAN format
- Channel status LED display
- Software selectable pull up/downs
- Software selectable CAN termination

System requirements:

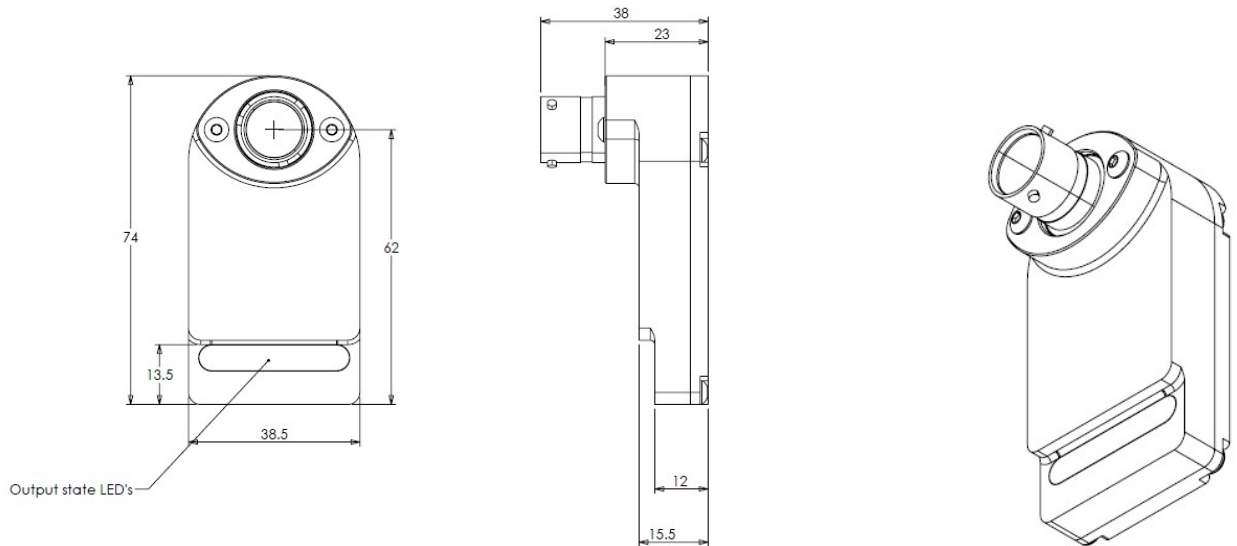
Electrical supply	.....	6.1 - 38 V
Recommended working temperature	.....	-40 to +85 °C
Environmental protection	.....	IP66
Installation notes	.....	See Appendix 2

Technical data:

Sample frequency	.....	1KHz
Communication	.....	CAN 2.0B
Analogue inputs	.....	8 x 12bit A to D
Speed inputs	.....	8 x 2Hz TO 1kHz (10Hz to 10kHz option)
CAN receive channels	.....	10
CAN transmit channels	.....	6
Baud rate	.....	Selectable up to 1MBaud
CAN termination	.....	Software selectable (120ohm)
Wiring connector fitted	.....	AS210 35PN
Chassis loom connector reqd	.....	AS610 35SN
Pin out	.....	See Appendix 1

Dimensions:

Length	.....	75 mm
Width	.....	37 mm
Height	.....	38 mm
Weight	.....	65 g



Ordering information:

Description	Part number
CAN Input Expander	ZE059-2

Appendix 1
Connector pin out

Pin Number	Function	Notes
1	Analogue 1	0-5V analogue Sensor Speed input compatible
2	Analogue 2	0-5V analogue Sensor Speed input compatible
3	Analogue 3	0-5V analogue Sensor Speed input compatible
4	Analogue 4	0-5V analogue Sensor Speed input compatible
5	Analogue 5	0-5V analogue Sensor Speed input compatible
6	Analogue 6	0-5V analogue Sensor Speed input compatible
7	Analogue 7	0-5V analogue Sensor Speed input compatible
8	Analogue 8	0-5V analogue Sensor Speed input compatible
9	GND	Supply and Sensor Ground
10	12 Volts	Supply voltage (Nominal 12 V battery)
11	CAN L	CAN low wire
12	5 Volt Sensor Supply	Sensor +ve supply voltage
13	CAN H	CAN high wire

Appendix 2
Installation and running notes

- Keep away from sources of direct heat
- Mount with AV isolation mounts
- Do not pressure wash or similar