FuelCAN™

Fuel Level Sender to J1939 Transmitter

The FuelCAN is a compact interface that translates fuel level sender signals into SAE J1939 CAN bus messages. The device allows integration of standard senders into modern J1939/CAN bus engine instrument and control systems.

FuelCAN modules have three inputs (only one of which is connected at any one time): input 1 is configured for use with Murphy ES series resistive fuel level senders; inputs 2 and 3 can be used with fuel level senders having compatible resistance ranges as shown below.

FuelCAN inputs can also be factory configured for use with other types of fuel level or resistive senders. FuelCAN is compact and light enough to be incorporated into most wiring harnesses but can also be surface mounted. The polycarbonate case is fully sealed in epoxy resin for high impact and environmental resistance. A rear facing LED indicates input/CAN bus status.

	Fuel Level / Approx. Resistance, Ohms				
	Empty	1/4	1/2	3/4	Full
Input 1 (Murphy)	240	147	96	60	33.5
Input 2	240	158	100	58	30
Input 3	10	56	95	138	180

Specifications

Power supply

Operating voltage: 7 to 35 VDC

Current consumption: 25 mA (typ.)

Inputs

Maximum operating range: -2 to +35 VDC

Input 1 sender range, Ohms: 240 (empty) to 33.5 (full)

Input 2 sender range, Ohms: 240 (empty) to 30 (full)

Input 3 sender range, Ohms: 10 (empty) to 180 (full)

Outputs

CAN bus: SAE J1939 protocol, PGN 65276 (00FEFC^{16})

-2 sec update rate

-120 Ohm terminating resistor optionally fitted

Source Address: 160 (0 x A0)

Physical

Case material: High impact ABS, epoxy filled

Weight: Approx 60 g / 0.13 lb

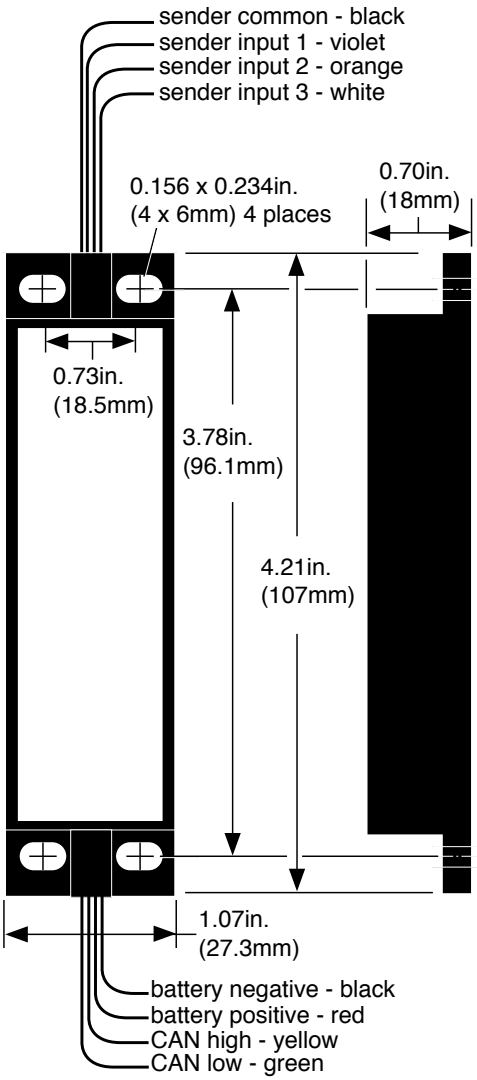
Operating temperature: -40° F to 185° F (-40° C to 85° C)

Environmental sealing: IP65 case, exposed lead ends

Electromagnetic compatibility: 2004/108/EC

CE

Dimensions* and Connections



Standard lead length 4in. (100mm) approx.

*Dimensions to be used only for reference. Use actual product for template.

Specifications - continued

Electrical:

-J1113-11 pulses 1c, 2a, 3a/b and 5a
-EN 61000-4-2 ESD
-EN 61000-4-3 Radiated disturbance
-EN 61000-4-4 Fast transients
-EN 61000-4-5 High energy transients
-EN 61000-4-6 Conducted RF disturbance
-CISPR 16-1-2, 4.3 Conducted Emissions
-CISPR 16-2-3 Radiated Emissions

How To Order

Part Number	Description	Notes
E2502000A	FuelCAN, FLC300 with no terminating resistor	
E2502100A	FuelCAN, FLC300-TR with terminating resistor	

Please contact your Murphy representative to discuss requirements. Also see SenderCAN and MeCAN variants literature.

NOTE: Minimum order quantities apply for custom solutions.