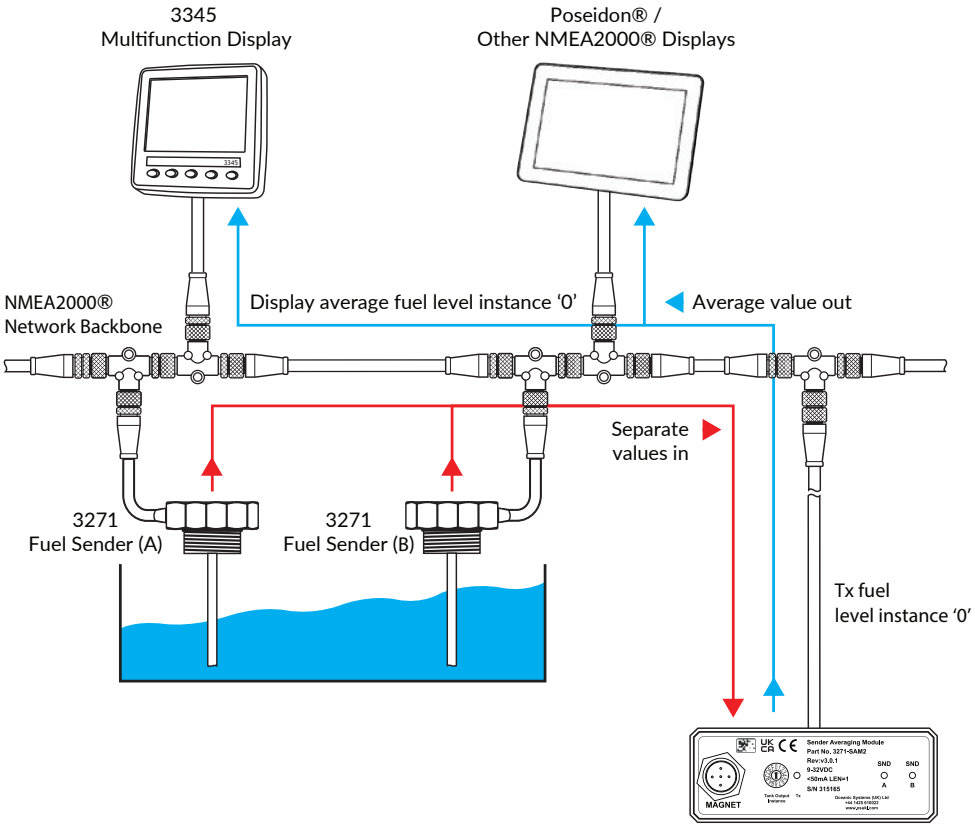
NMEA2000® Sender Averaging Monitor
Part Number: 3271-SAM2
USER MANUAL

INTRODUCTION

The 3271-SAM2 Sender Averaging Module is designed to mathematically average two NMEA2000® fuel level sender messages and output a single averaged NMEA2000® fuel level message that can be displayed on any suitable NMEA2000® display.

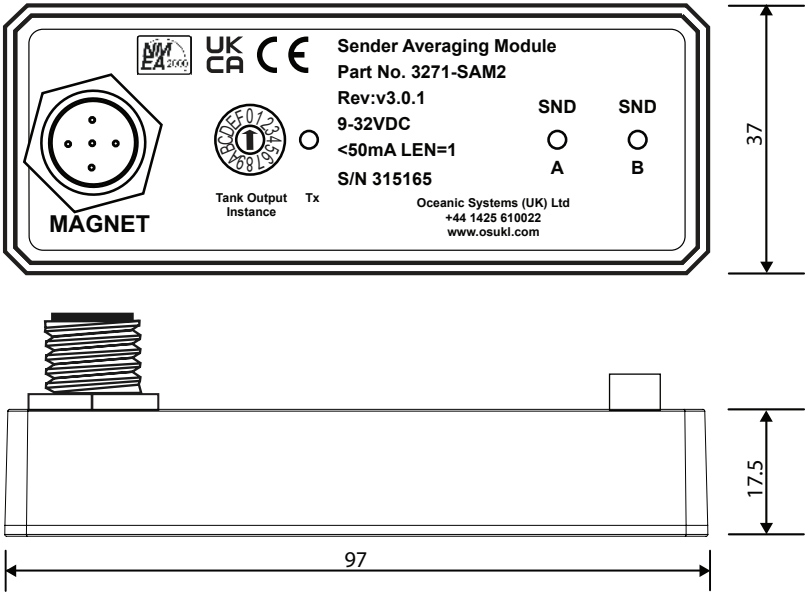


SAFETY INSTRUCTIONS

This unit should only be installed by a person competent and experienced in working on electrical systems on boats. Before beginning the work the battery should be disconnected to avoid the risk of a short circuit, fire or explosion. Before drilling any holes to mount the unit or run the cabling always make sure it is safe to do so.

LOCATION AND INSTALLATION

The Tank Sender Adaptor is water resistant but NOT waterproof. It is designed to be located in a dry and protected location in the cable run between the NMEA2000® network and the tank level sender. It does not need to be attached to any surface but should be restrained from free movement by means of cable ties to the rest of the cable run or similar.



CALIBRATION AND SETUP

No calibration is required. The device Instance Rotary Switch on the front of the unit sets the averaged output instance number and selects the input sender instances to be averaged according to the following table:

Rotary Switch Position	0	1	2	3	Any other No.
First Input Sender Instance	8	A(10)	C(12)	E(14)	No Input
Second Input Sender Instance	9	B(11)	D(13)	F(15)	No Input
Average Output Device Instance	0	1	2	3	No Output

If volumetric mode is required, the volume table must be applied to both senders and not to the SAM2.

OPERATION

When power is provided to the network and two fuel level senders to be averaged are connected the following LEDs will be illuminated:

LED Status	Transmitting	First Input Sender Status	Second Input Sender Status
BLUE flash 2.5 Secs	Transmitting data OK	N/A	N/A
BLUE flash 1 Sec	Invalid rotary SW position	N/A	N/A
GREEN flas	N/A	First input sender OK	Second input sender OK
RED flas	N/A	First sender water in fuel	Second sender water in fuel
RED solid	N/A	First sender not found	Second sender not found

TROUBLESHOOTING

No LEDs illuminated on front pane	Check the power connection
Flashing Red LED	See sender manual for water in fuel troubleshooting
Solid Red LED	No sender is present; check sender is correctly connected to the network. Check sender instance is set according to table.
I cannot see fuel level on display device, but all LED's are flashing correctl .	Check device is capable of showing NMEA2000® Fuel level data. Check display is set to the same device instance as the averaging module

TECHNICAL SUPPORT

If you require technical support for any Oceanic Systems products you can reach us using any of the following:-

tel: +44 (0)1634 290772

email: sales@energy-solutions.co.uk

web: osukl.com or energy-solutions.co.uk

WARRANTY

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