

# SENDER AVERAGING MODULE

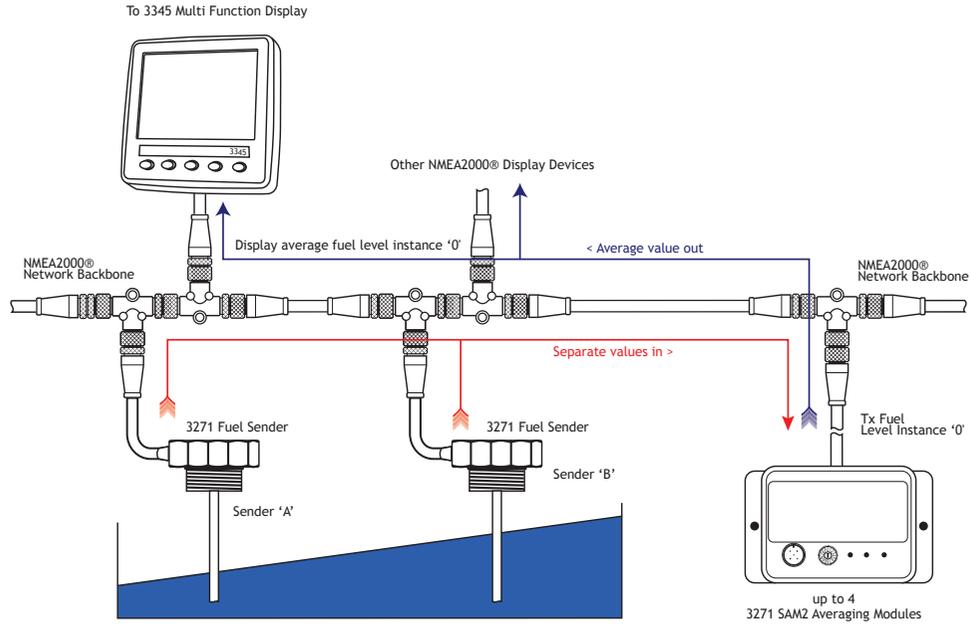
Part Numbers: 3271-SAM2

## INSTALLATION AND OPERATING INSTRUCTIONS



### 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 work the battery should be disconnected to avoid the risk of a short circuit, a fire or an 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 unit can be located anywhere on the network backbone. It should be mounted to a flat surface and secured using two screws using the holes on the side of the unit. (screws not included).

### CALIBRATION & SETUP

The module requires no calibration.

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 Flash	N/A	First Input Sender OK	Second Input Sender OK
RED Flash	N/A	First Sender Water In Fuel	First Sender Water In Fuel
RED Solid	N/A	First Sender Not Found	Second sender Not Found

### TROUBLE SHOOTING

No LEDs illuminated on front pane	LED Status
Flashing Red LED	LED Status
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 correctly.	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 (UK) Ltd products you can reach us using any of the following:

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