



NMEA 2000 Pressure Sensor WiFi Configuration Interface

User Guide

Installing the Sensor

First, install the sensor to the appropriate threaded pressure port. Depending on the type or pressure rating, the sensor has 1/4" NPT thread, so be sure to use it in the appropriately sized pressure port or use an adapter to interface the sensor to your particular port thread. Use approved thread sealer for the media being measured.

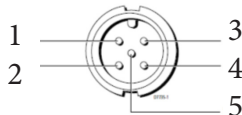
Connecting the Hardware to an Existing NMEA 2000 Backbone

Connect the NMEA 2000 drop cable from a "T" connector to the sensor hardware. The sensor is powered via NMEA 2000. All NMEA 2000 signals and power are galvanically isolated from the sensor's stainless steel body. If you don't have an NMEA 2000 network, you can watch this video to understand how to set one up:

<https://www.youtube.com/watch?v=U4jAxINtF5w>

Pin #	Pin Designator	Pin Type	Function
1	SHIELD	Power	NMEA 2000 Shield Connection
2	NET-S	Power	NMEA 2000 Power Supply Positive
3	NET-C	Power	NMEA 2000 Ground
4	NET-H	Comms	NMEA 2000 CAN High Signal

Table 1: NMEA 2000 M12 Connector



5	NET-L	Comms	NMEA 2000 CAN Low Signal
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Configuring the Sensor

NOTE !!! - Please note that when editing settings, there is delay before saving the new settings. Check "Device Information" page to confirm that the new settings have been saved.

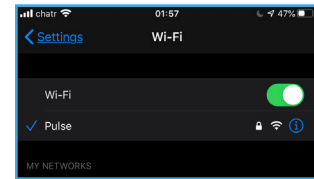
All Across Ocean System's NMEA 2000 sensors are equipped with built-in WiFi interface for configuring the sensor. Once the sensor is connected to a powered and properly terminated NMEA 2000 network, the sensor LED will start flashing with an interval of about 3 seconds. This is an indication of normal sensor operation. At this point, the WiFi interface in the sensor is disabled.

To enable the interface and configure the sensor, execute the steps in the paragraph below:

Enabling the WiFi Adapter

1. Power on the sensor by connecting it to the NMEA 2000 network. If the LED on the sensor is flashing with rate of 0.5s at 3 seconds intervals, the sensor is functioning properly.
2. In about 15 sec after power-up, the LED flash pattern will change and the LED will start flashing much faster with rate of 0.5s at 1 second intervals (0.5s On/0.5s Off). Now disconnect the sensor from power.
3. After few seconds, reconnect the sensor again to the NMEA 2000 network (power it on).
4. On your smart phone or computer, go to the WiFi settings.
Find and connect to the following network:

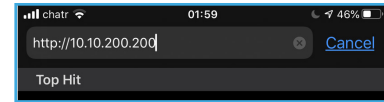
SSID = **Pulse** and enter for
 Password = **#Pulse-00000**



5. Once connected, you are ready to configure your pressure sensor

Connecting to the Sensor and Configuring it for the Specific Pressure Source

1. Open your web browser - preferably Chrome. Make sure that there are no other tabs or browser windows open
2. On the address field, type "http://10.10.200.200" (no quotation marks) and press "Enter".
3. Tap the menu icon and navigate through the different pages.
4. On the "Device settings" page type appropriate name for your sensor. It will replace the serial number currently displayed as a title. The name typed, automatically populates the "Description 1" field that is used in NMEA2000 output. There is also optional "Description 2" field
5. On "Input settings" page select the one or few of the possible PGNs that this sensor type will output to the NMEA2000 network.
6. Select from the list the data source to match your usage by picking the most appropriate option from the list:



- Atmospheric Pressure
- Water Pressure
- Steam Pressure
- Compressed Air Pressure
- Hydraulic Pressure
- Filter Pressure
- Altimeter Pressure
- Oil Pressure
- Fuel Pressure



Configuring 0 (zero) position

On regular pressure sensors, sometimes, there may be a small deviation from the sensor's 0 position.

To set up the sensor's 0 position:

1. Make sure there is no pressure being applied to the sensor.
2. Add ONLY ONE calibration point and replace the entry on the right side with 0.
3. Tap or click on the AOS Ltd. Logo, and see if your sensor is now displaying 0.



Status LED Blink Codes:

On the majority of the Across Ocean Systems' sensors you will see a blinking Status LED. It is designed to provide information of the status of the sensor and also to help troubleshoot it, if necessary. New Blink Codes were implemented with Firmware Ver. 2.4.2.911

Here is how to read the blink duration:

- Fast Blink = 0.2s on / 0.2s off Fast Blink
- Blink = 0.35s on / 0.35s off Blink
- Long Blink = 1.3s on / 0.35s off Long Blink
- Blink + Pause = BlinkE = 0.35s on / 2.5s off BlinkE

The meaning of the blink codes is explained below:

Sensor Operational - all OK = Short on /Very Long off

AP Boot = Continuous Fast Blink -> during this state toggle the power to start and configure the sensor via its web interface

Save Pending = 3.1s on / 0.4s off = Very Long on, Short off -> changes of configuration. Do not disconnect till the changes are saved

Chip Error = Blink, BlinkE = 2 Blink + Pause -> Call Technical Support

Conversion Timeout = Blink, Blink, BlinkE = 3 Blinks + pause -> Call Technical Support

Status N2k Error = Blink, Blink, Blink, BlinkE = 4 Blinks + pause -> Check your NMEA2000 connection of your network

Sensor Error = Blink, Blink, Blink, Blink, BlinkE = 5 Blinks + pause -> Check your pressure sensor connector



5 Blinks + pause illustrated above