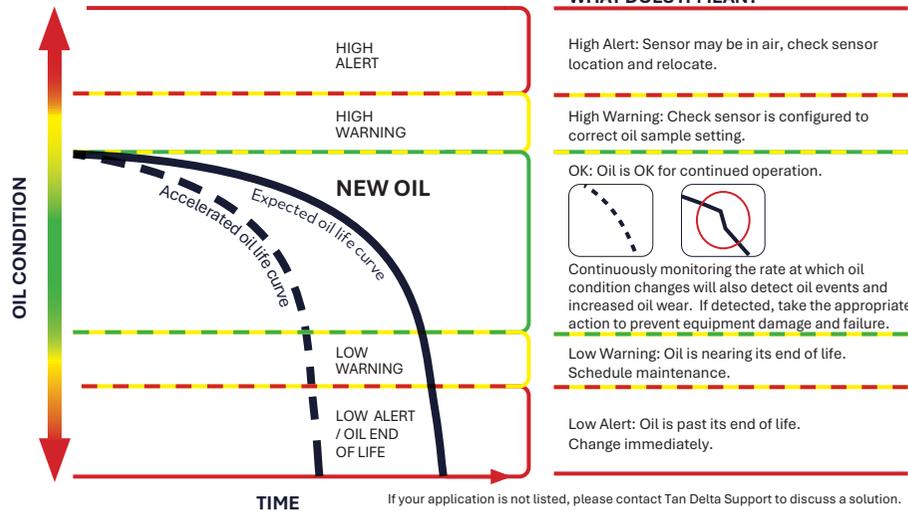


## 4 INTERPRETING OIL CONDITION



## 5 SUPPORT - FAQ / TROUBLESHOOTING

If you have any issues, please CLICK or SCAN the QR Code and read our FAQ section.

Alternatively, email: [support@tandeltasystems.com](mailto:support@tandeltasystems.com)



### 5.1 Full SENSE-3 User Guide

You can find further information in the SENSE-3 User Guide provided on the USB and available on the downloads page of our website:

[www.tandeltasystems.com/downloads](http://www.tandeltasystems.com/downloads)

If you have any further questions, please contact our support team.

Tan Delta Systems Plc

Copyright © Tan Delta Systems PLC

1 Carrera Court, Church Road,

Dinnington, Sheffield UK

S25 2RG

Tel: +44 (0)845 094 8710

Email: [support@tandeltasystems.com](mailto:support@tandeltasystems.com)

# GATEWAY KIT - SENSE-3 QUICK START GUIDE

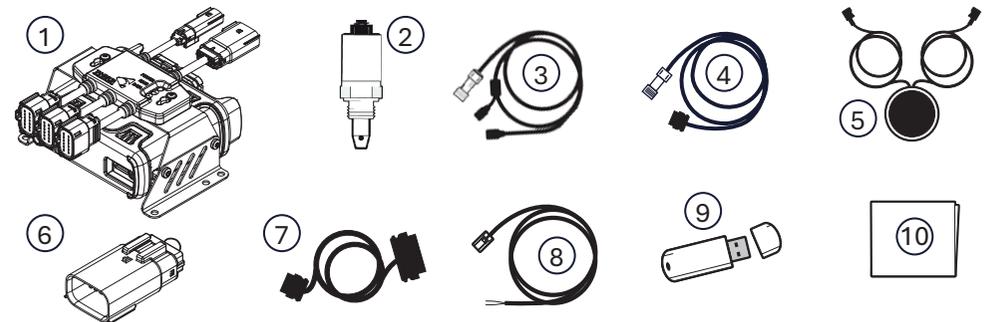


### ! IMPORTANT

We recommend that this kit is installed by a trained installation engineer or Tan Delta Distributor.

### What's in the box? - Product Code: SENSE-3-BS1

Item	Description
1	SENSE-3 Unit - Gateway pre-assembled with Gateway Hub and Mounting Kit
2	Gen II Oil Quality Sensor (OQSx-G2)
3	Configuration Cable (Cable J)
4	Sensor to Gateway Hub cable (Cable SH)
5	Gateway 4 G Antenna Cable
6	Gateway Hub Continuity Plugs (HCP-1) - 2 supplied, pre-fitted in 2 Sensor connectors
7	Gateway Hub to Gateway Cable 0.2 m (Cable GH) - pre-fitted in Gateway & Hub
8	Gateway Hub Power Cable 10 m (Cable HP)
9	USB Stick containing: Tan Delta's Gateway Configurator Software, Configuration and Data Management Software (CADS), and SENSE-3 User Guide
10	Quick Start Guide



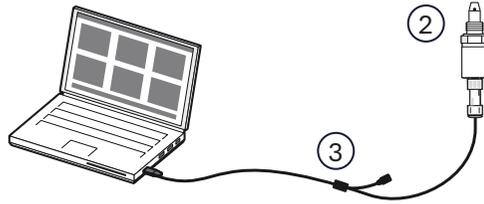
## 1 CONFIGURATION AND INSTALLATION OVERVIEW

- Install CADS from the USB
- Configure the OQSx-G2 sensor using CADS.
- Configure the Gateway using the Configurator Software
- Install the OQSx-G2 sensor(s) on your asset(s) and the Gateway in a suitable location.
- Check the system for correct operation.

## 2 CONFIGURATION

### 2.1 Configuring the OQSx-GS Sensor

- 1) Install CADS from the provided. CADS is also available as a download from: <http://oilconditionsoftware.com/setupcads.exe>
- 2) Make sure that you have Administrator rights on your PC/Laptop. Locate the **setupcads.exe** file and start the installer. Select **Launch CADS**.
- 3) Plug the **Configuration cable** ③ into an available USB port and allow the update/installation of drivers.
- 4) From the CADS main menu, select **Configure OQSx**.
- 5) Connect the **Sensor** ② to the **Configuration cable** ③.
- 6) CADS will display a list of available sensors, identified by their serial numbers. Select the required Sensor by checking its Serial Number.
- 7) Select the **Modbus RTU over RS485** communications protocol.



#### ! VIDEO TUTORIAL

For a video tutorial, showing the Modbus RTU Configuration process, visit the website below, or scan the QR code.

<http://oilconditionsoftware.com/configuremodbus>



- 8) Each sensor installed on the same system MUST have a unique **Node ID**. Set a unique **Node ID** from 1 - 16 for each sensor.
- 9) Make sure that **9.600 Kbps Bit Rate** is selected.
- 10) Select the correct oil for each sensor.

### 2.2 Configuring the Gateway

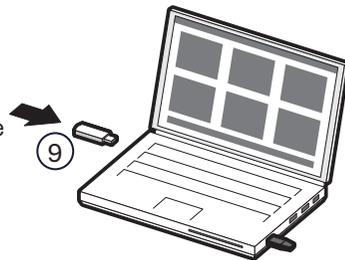
#### ! VIDEO TUTORIAL

For a video tutorial, showing the Gateway Configuration process, visit the website below, or scan the QR code.

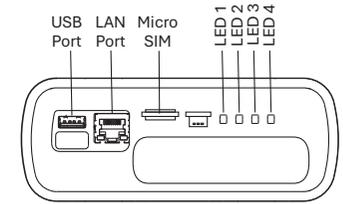
<http://oilconditionsoftware.com/configuregateway>



- 1) From the **USB** ⑨, on the **Gateway Configuration Tool** and configure the Gateway network for 4G SIM, WiFi, or Ethernet using the on the USB. Save the configuration as a **\*.conf** file.
- 2) Connect the free ends of **Cable HP** ⑧ to a suitable power source (9-30V DC).
- 3) Connect **Cable HP** ⑧ to the **Gateway Hub** ①. After one minute, the Gateway will boot up and LED 3 will have a steady green light.



- 4) Insert the **USB** ⑨ into the **Gateway** ① USB Port. LED 2 will turn red for a few seconds, then all LEDs will go off.
- 5) Remove the **USB** ⑨ at this point.
- 6) After one minute, the Gateway will reboot. LED 3 will have a steady green light. LED 4 will have a steady amber light once the Gateway has connected successfully to **TD Online**.



## 3 INSTALLATION

#### ! IMPORTANT

Configure all your sensors before powering on the system.

- 1) Install each sensor on its intended asset (Engine, Gearbox etc.).

#### ! VIDEO TUTORIAL

For a video tutorial, showing the OQSx-G2 Sensor Installation process, visit the website below, or scan the QR code.

<http://oilconditionsoftware.com/installsensor>



- 2) Mount the **SENSE-3** unit to a wall or rigid surface using any 4 of the 6 x Ø6.5 clearance holes. Make sure the IP 67 cover is attached.
- 3) Route each **Cable SH** ④ from its sensor to slot S1, S2, or S3, as required.
- 4) Retain a **Continuity Plug** ⑥ in each unused slot
- 5) If using a 4G SIM, attach the **Antenna** ⑤ to the **Gateway** ①.
- 6) Install the 4G Antenna in a high point, with clear line of site to the sky to obtain the best signal.
- 7) Check that **Cable HP** ⑧ is connected to the **Gateway Hub** ① and a power supply of 9-30 V DC.
- 8) Check that data is coming through on **TD Online** for each sensor.

