



Extend oil use



Reduce maintenance



Reduce breakdowns



Detect contamination

PRODUCT DESCRIPTION

SENSE-2 is a complete real-time oil condition analysis and monitoring kit that can be easily installed on any equipment. It enables you to immediately secure the benefits of real-time oil condition analysis and monitoring: reduced oil use, reduced maintenance costs, pre-emptive fault detection.

Actual oil condition and remaining oil life is continuously analysed, logged and displayed in real time. Configurable analytics trigger alerts in the event of unexpected contamination and/or oil wear. The built-in data logger and wireless interfaces make downloading data for further analysis simple.

SENSE-2 is a complete plug-and-play solution that can be fitted to any equipment operating in any environment using any type of oil. Everything is included for quick and easy installation.

KEY FEATURES

- Real-time oil analysis**
 Continuous real-time oil condition analysis with 0.01% sensitivity, detecting and reporting changes caused by wear and/or contamination.
- Any oil type and equipment – Sense-2**
 Can be fitted and used on any equipment type operating in any environment using any oil type – mineral or synthetic.
- Event alerts**
 Immediate detection and alert in the event of contamination and or unseen equipment issues which may lead to breakdowns or damage.
- Maintenance prediction**
 Accurately predict when equipment needs maintenance based upon rate of change and accurate EoL definition.

BENEFITS

- Reduce maintenance costs**
 Enables you to predict and pinpoint when equipment requires maintenance and oil is truly at the end of its life. This typically enables you to safely extend intervals between maintenance and reduce associated costs by approximately 30% per year.
- Reduced downtime**
 Unseen equipment issues cause subtle changes to oil condition, which are detected and alerted, enabling preemptive maintenance before failure or major damage and or accelerated wear.
- Environmental (ESG) targets**
 Safely maximise oil use to reduce consumption by approximately 30% per annum. Reduce parts consumption and extend equipment life.



Display Express provides clear and accurate real-time oil condition status.

TECHNICAL DATA

Product information

Name	SENSE-2 Display Kit
Product No.	SENSE-2

Physical

Material	Heat resistant polycarbonate
Dimensions	151mm x 66mm x 42mm (L x W x H)
Weight	300g

Electrical

Supply	+9-30V DC
Consumption	0.4w average, continuous 200mA

Data output/input

Analog output	1 x 4-20mA
Digital output	1xRS485: 9600 baud half duplex to sensor 1xRS485: 115200 baud half duplex from display

Data logging

Logging interval	5 minutes
Battery backup	~10 years
Data download	Via WiFi using any internet-enabled device
Real-time clock	Yes

Environmental

Operating temperature	-30°C (-22°F) to +65°C (+149°F)
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Display

Oil condition	Tan Delta Number (TDN)
Oil temperature	-20°C (-4°F) to +120°C (+248°F)
Oil life remaining	Days
Status indicator	LED

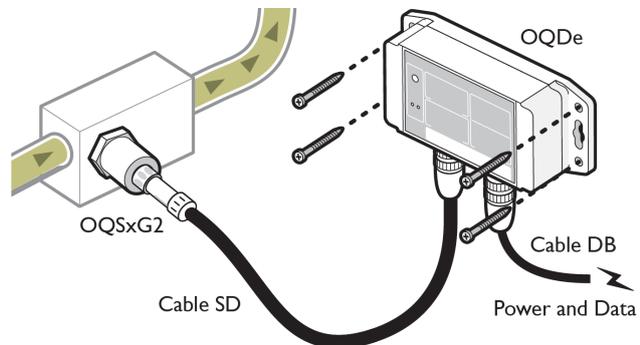
Network

Supported WiFi bands	802.11b/g/n 2.4GHz
WiFi security	WPA1/WPA2
IP addressing	IPv4 DHCP or static
Operating modes	Client or hotspot
Integration options	JSON API

Standards and certification

Water and dust	IP67 when connected BS EN 60529:1992+A2:2013
Shock and vibration	BS EN 60068-2-30 (Test Db - Cyc.Hum.) BS EN 60068-2-6 (Test Fc - Sine Vib.) BS EN 60068-2-27 (Test Ea - Mech.Shock)
EMC	EN 61000-6-4:2007 (generic emissions standard for industrial environments) EN 61000-6-2:2005 (generic immunity standard for industrial environments) EN 61000-6-2:2007 (generic immunity standard for industrial environments) EN 300 328 v1.8.1 (transferable electromagnetic compatibility for wideband data transmission equipment operating in the 2.4GHz ISM band and using wideband modulation techniques)
Conformity	CE & UKCA Marked RoHS compliant

DIMENSIONS, INSTALL & CONNECT



WHAT'S IN THE BOX?

- 1 x OQsX-G2 Sensor (choice of 1/2" BSPP, 1/2" NPT, M18x1.5, 7/8-14 UNF threads)
- 1 x Display Express
- 1 x Cable J configuration cable
- 1 x Cable SD sensor to display cable 2m
- 1 x Cable M display to configuration cable
- 1 x Cable DB display to bare ends cable 2m
- 1 x International 15VDC Power Supply
- 1 x Quick Start Guide

WHY TAN DELTA

Tan Delta advanced oil condition analysis technologies and products enable enhanced and highly accurate real-time monitoring and management of oil and rotating equipment. Superior accuracy combines with fully holistic analysis to deliver the ultimate equipment monitoring capability and insight. Used and trusted around the world by equipment operators to reduce costs and improve efficiency. Tan Delta provide ready-to-go equipment to end users, as well as embedded and customised product solutions to original equipment manufacturers.



Tan Delta provide OEM equipment manufacturers with fully customised integrated and cost-optimised solutions. Please contact us directly to discuss your oil condition requirements.