



Extend oil use



Reduce maintenance



Reduce breakdowns



Detect contamination

## PRODUCT DESCRIPTION

The Display Express (OQDe) is an oil condition data display and logging solution designed for plug-and-play compatibility with all Tan Delta real-time oil condition sensors.

Real-time oil condition is clearly displayed in either Loss Factor (%) or Tan Delta Number (TDN), along with current oil temperature, providing you with an instant and accurate snapshot of the condition of your oil and equipment. Oil Life Remaining (days) enables easy prediction and therefore planning of when maintenance is needed.

Display Express logs all data and is provided with our INSIGHT application, which enables you to connect any device to Display Express wirelessly, and to download and display data.

OQDe is engineered for installation and continuous use in even the most extreme industrial or commercial environment. Quick and simple to install and easy to use.

## KEY FEATURES

- Essential information**  
 Displays real time oil condition, oil temperature and days remaining to oil end of life, and any alerts.
- Event alerts**  
 Configurable traffic light alert system provides simple visual alerts to events such as contamination.
- Data logging**  
 All data is continuously logged and can be easily downloaded.
- Connectivity**  
 Built-in WiFi enables easy connection to mobile devices or other networks to share and stream data - integrate real-time oil condition straight into your IoT platform (JSON API).
- Robust and reliable**  
 Water, shock and vibration-proof. Engineered for use in all industrial and commercial environments.

## 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 pre-emptive 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.

## CASE STUDY

Genset operator wanted to install OQSx-G2 on existing medium-size gensets to reduce oil consumption and unnecessary maintenance.

For simplicity, Display Express was used to display the data at an easily visible location on the genset where maintenance teams could quickly check and download logged data to their mobile phones. The customer chose the use of Display Express for simplicity and speed, enabling them to equip their fleet with real-time oil condition monitoring within only a few weeks, without complexity.



## TECHNICAL DATA

### Product information

Name	Display Express (OQDe)
Product No.	Express

### 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

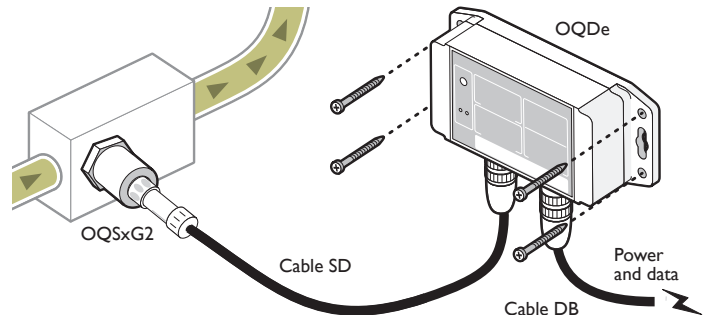
### Network

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 wide-band modulation techniques)
Conformity	CE & UKCA Marked RoHS Compliant

## DIMENSIONS, INSTALL AND CONNECT



## WHAT'S IN THE BOX?

- 1 x Display Express



### Product buying alert notice

Cables are not supplied with this product. These are supplied separately – see Cable section of our website.

For configuration you will require 1 x Cable-J and 1 x Cable-M.  
For installation you will require 1x Cable SD & 1x Cable DB.

## 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.



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