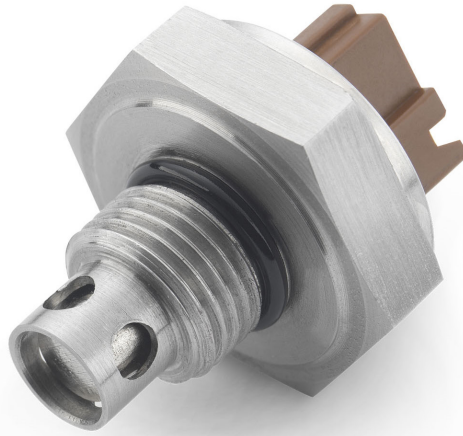


SENSOR | OQSX-G2 IM

Product No.: OQSXG2-IM



PRODUCT DESCRIPTION

OQSx-G2 IM is a hybrid hardware and technology license, oil condition analysis and analytics monitoring solution designed for embedded integration in higher volume cost sensitive applications. Ideal for automotive and other high volume applications.

OQSx-G2 IM is powered by our proprietary FSH core technology which combines real time oil condition analysis with data analytics to provide unmatched insight into equipment maintenance and health status. The electro-chemical properties of oil are continuously analysed to a sensitivity of 0.001%, generating high quality raw data, which is then processed using our advanced analytics. This enables OQSx-G2 IM to accurately detect and measure all wear, contamination and failure modes and reliably inform you when equipment requires maintenance.

OQSx-G2 IM can be integrated on any equipment where existing ICU or other similar data processing capable devices exist.

KEY FEATURES

• FULL SPECTRUM HOLISTIC (FSH™)

Unique capability to detect and measure all and any wear and contamination - water, acid, fuel, viscosity, different oil types, carbon, particles etc.

• ANALYSIS ACCURACY

FSH technology analysis, detects and measures changes in the electro-chemical properties of live oil in real time down to 0.001% (10ppm) change sensitivity. Unmatched raw data quality.

• REAL-TIME

Continuously analyses and reports oil condition on operating equipment and reports oil condition every 2 seconds.

• ROBUST & RELIABLE

Proven around the world for use in even the most extreme industrial and commercial applications.

• FLEXIBLE INTEGRATION

Modular hardware and software architecture for optimal integration.

BENEFITS

Tan Delta advanced oil condition monitoring provides a new level of equipment condition insight resulting in reduced operating and ownership costs through a combination of, optimised maintenance scheduling, advanced fault detection, longer equipment life and reduced waste.

• MAINTENANCE OPTIMISATION

High quality real time analysis data enables optimal maintenance points to be identified and predicted.

• ADVANCED FAULT DETECTION

Detect early signs of issues before equipment damage to enable pre-emptive maintenance and reduce breakdowns.

• ENVIRONMENTAL (ESG)

Reduce waste, extend equipment life, increase equipment productivity and efficiency. Reduce carbon footprint.

TECHNICAL DATA

PRODUCT INFORMATION

Name	Gen 2 - Oil Quality Sensor
Product Number	OQSxG2-1M

PHYSICAL

Material	CuZn28, Brass (typical)
Dimensions	45mm x 36mm (L x W)
Weight	100g
Connection	32mm AF Hex
Torque	25N·m

AVAILABLE THREADS

Thread	Seal
M16	'O' Ring

(Alternative threads/seals available upon OEM request)

CONNECTIONS

Connector	Deutsch (typical)
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(Alternative connections available upon OEM request)

ELECTRICAL

Supply	+9-30V DC
Consumption	0.4w Average

DATA OUTPUT/INPUT

Digital Output	CANbus
Protocols Supported	CanOpen and J1939
Analog Output	4-20mA (typical)

OIL QUALITY DETECTION PARAMETERS

Frequency	Every 2 seconds
Output	Tan Delta Number (TDN) Oil Temperature (C or F)
Sensitivity / Accuracy	0.001%, +/-0.5%
Elements	All wear and contamination

OIL TYPE

Configuration	Any mineral, semi-synthetic or synthetic oil, including fuels (diesel & bio-diesel)
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ENVIRONMENTAL

Operating Temperature	-40°C (-40°F) to +120°C (+248°F)
Calibrated Temperature	-20°C (-4°F) to +120°C (+248°F)
Fluid Temperature	-40°C (-40°F) to +120°C (+248°F)
Fluid Pressure	up to 70 bar (1015 psi)
Storage Temperature	-55°C (-67°F) to +150°C (+302°F)

STANDARDS & CERTIFICATION

Water & Dust	IP68 when connected
Shock & 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)
Conformity	CE Marked RoHS Compliant

Tan Delta provide OEM equipment manufacturers with fully customised, integrated and cost optimised solutions. The above technical data can be used for guidance and is based on typical parameters, however Tan Delta will work with an OEM to fulfill their required project specifications and meet desired standards and certifications.

WHY TAN DELTA

Tan Delta's advanced real-time oil condition monitoring is used by equipment owners around the world to improve reliability and reduce costs. Our core FSH technology delivers exceptional real-time oil analysis and condition insight. From wind turbines and ships to mining trucks and railways, Tan Delta real-time oil condition monitoring solutions are proven to deliver substantial operational and financial benefits. Our products are easy to install and use on any equipment and are fully supported by our dedicated support team.