



**“If it can be removed by filtration it
shouldn’t be there...”**

Micron Eagle Filtration Technology



Fluid Conditioning Monitoring

OQSx-1-AA-02-5



Accurate Real Time Fluid Condition Monitoring

The Fluid Quality Sensor (OQSx) is your ideal solution for accurate real time oil condition monitoring. Easily and quickly installed the OQSx detects all wear and contamination elements to an exceptionally high sensitivity level and provides An accurate statement of oil condition second by second –any application.



The OQSx and QODx perfectly compliment the filtration system to provide full protection of your system

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Key Features

OQSx-1-AA-02-5

- **Accurate**

The OQSx accurately reports the precise condition of the fluid in real time and is certified to better than 15ppm sensitivity.

- **Advanced Technology**

Patented core technology delivers exceptional sensitivity to oil condition changes caused by both wear and contamination.

- **Proven Performance**

Independently certified for accuracy, sensitivity significantly reduces ongoing operating costs and reliability. Accurate data you can trust.

- **Robust and Reliable**

Engineered for installation and long term maintenance free operation in the harshest industrial and commercial applications.

- **Easy to Install**

The OQSx is small and easy to install on any equipment and application



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Benefits

OQsX-1-AA-02-5



- **Optimise Service Intervals**

Optimise service intervals without risking equipment performance and reliability.



- **Lower Operating Costs**

Less downtime and less maintenance significantly reduces ongoing operating costs.



- **Improved Safety**

Ensures your equipment is in optimal condition making a safer working environment.



- **Help the Environment**

Increase equipment efficiency, reduce oil consumption, maintenance activity and costs and conserve the environment.



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Specification

OQSx-1-AA-02-5

Product Code

OQSx-1-AA-02-5

Physical

Material - Stainless Steel AISI304

Dimensions - 90mm x 37mm (L x W)

Weight -160g

Thread - 1/2" BSPP Thread / M32 Hex thread

Seal - DIN 3869 Viton Seal (Alternative seals and threads available upon request)

Electrical

Connections - Male (IEC 61076-2-106) (Alternative connections are available upon request)

Power Supply - 9-30 V DC

Power Consumption - Average 0.4w continuous 30mA

Data Output/Input

Analogue Output - 2 x 4 – 20mA (current syncing, passive input)

Digital Output - 1 x RS485: 9600 baud half duplex, Modbus protocol supported on RS485,

CANbus: CANopen protocol supported on RS485



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Specification Continued

OQSx-1-AA-02-5

Oil Quality Detection Parameters

Frequency - 15 per second, Sensitivity - Certified better than 15ppm sensitivity,
Accuracy - +/-1%, Elements - All wear and contamination elements

Oil Type

Any synthetic or mineral oil – including fuel oils such as diesel and bio diesel

Environmental

Sensor Temperature - -20degC (-4degF) to +120degC (+248degF)

Fluid Temperature - -20degC (-4degF) to +120degC (+248degF)

External Pressure - 0 Bar (0 psi) to 20 Bar (290 psi)

Fluid Pressure - Up to 20 Bar (290 psi)

Standards and Certification

Water & Dust - IP67 when connected, Shock & Vibration - **BS EN 60068-2-30** (Test Db-Cyclic Humidity), **BS EN 60068-2-6** (Test Fc-Sine Vibration), **BS EN 60068-2-27** (Test Ea-Mechanical Shock)

EMC - **EN 61000-6-4:2007** (Generic Emissions Standard for Industrial Environments), **EN 61000-6-2:2005** (Generic Immunity Standards for Industrial Environments)

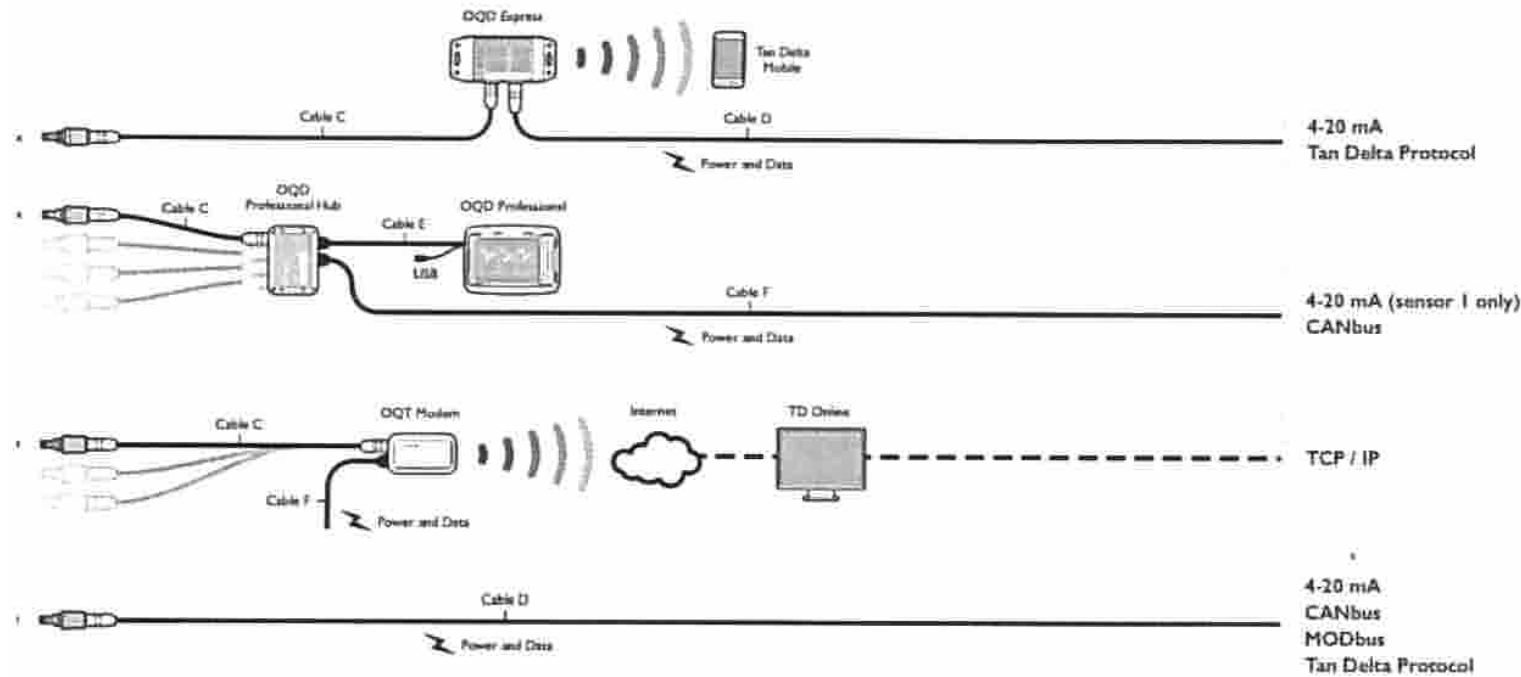


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System Architecture

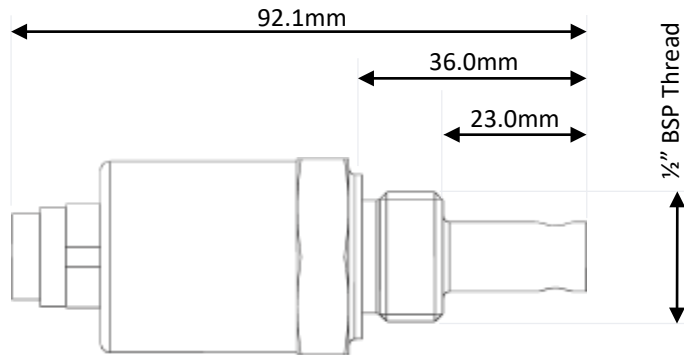
OQSx-1-AA-02-5



Micron Eagle Filtration Technology



Dimensions



OQSx-1-AA-02-5

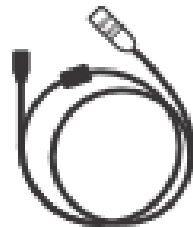
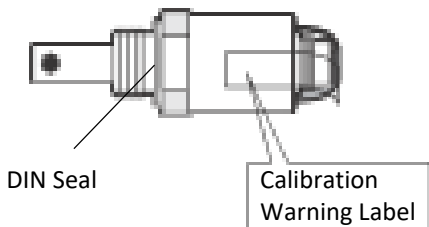


In The Box

OQSx Unit

Configuration Cable

Product USB



- Configuration and Data Software (CADS) & Manual

Quick Start Guide

Certificate Of Calibration

Certificate Of Compliance

Certificate Of Conformity

NOTE: You may require additional cables to complete your installation. Please refer to the Systems Architecture diagram

Micron Eagle Filtration Technology



Fluid Conditioning Monitoring

OQDe-A-2-1



Display OQSx Sensor Data in Real Time

The OQD Express (OQDe) displays and logs real time data from the Oil Quality Sensor (OQSx). Oil quality, temperature, rate of change and configurable quality level alerts are displayed in real time.

Robust and easy to install, the OQDe is the perfect partner for the OQSx.



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Key Features

OQDe-A-2-1

- **Essential Information**

Displays oil quality, temperature and rate of change in real time.

- **Bluetooth Connectivity**

Stored data can be easily downloaded and sent wherever needed.

- **Configurable Quality Alerts**

Configurable traffic light alert system provides simple visual oil quality reference.

- **Data Logger**

Continuously logs up to 800,000 records of oil quality data which can be downloaded for analysis.

- **Robust and Rugged**

The rugged IP67 rated enclosure and high quality industrial connectors make the unit extremely reliable.

- **Independently Tested**

Has undertaken rigorous independent testing to verify the outstanding performance in a wide variety of applications.



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Benefits

OQDe-A-2-1



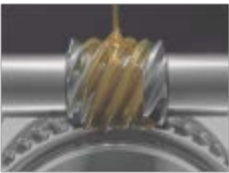
- **Increased Reliability**

Detects and reports the early signs of hidden issues enabling remedial action to prevent accelerated wear and unexpected breakdowns.



- **Help The Environment**

Increase equipment efficiency. Reduce oil consumption, maintenance activity and costs and conserve the environment.



- **Fewer Service Intervals**

Less maintenance and servicing means increased equipment availability and reduced costs.



- **Peace of Mind**

Knowing that your critical equipment is being monitored 24 hours a day, 365 days a year.



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Specification

OQDe-A-2-1

Product Code

OQDe-A-2-1

Physical

Material – Heat Repellent Polycarbonate

Dimensions - 120mm x 66mm x 42mm (W x H x D)

Weight -300g

Electrical

Power Supply - 9-30 V DC

Power Consumption - Average 0.4w continuous 200mA

Data Outut/Input

Analogue Output - 1 x 4 – 20mA

Digital Output - 1 x RS485: 9600 baud half duplex to Sensor, 1 x RS485: 512000 baud half duplex from Display

Environmental

Operating Temperature - -30degC (-22degF) to +65degC (+149degF)



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Specification Continued

OQDe-A-2-1

Data Logging

Logging Interval - Configurable 1 minute to 45 days

Battery Backup - ~10 years

Data Download - Via RS485 or Bluetooth

Real Time Clock - Yes

Display

Oil Quality, Oil Temperature, Rate of Change (Condition/Time), Status Indicator

Standards and Certification

Water & Dust - IP67 when connected, Shock & Vibration - **BS EN 60068-2-30** (Test Db-Cyclic Humidity), **BS EN 60068-2-6** (Test Fc-Sine Vibration), **BS EN 60068-2-27** (Test Ea-Mechanical Shock)

EMC - **EN 61000-6-4:2007** (Generic Emissions Standard for Industrial Environments), **EN 61000-6-2:2005** (Generic Immunity Standards 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)

CE Marked

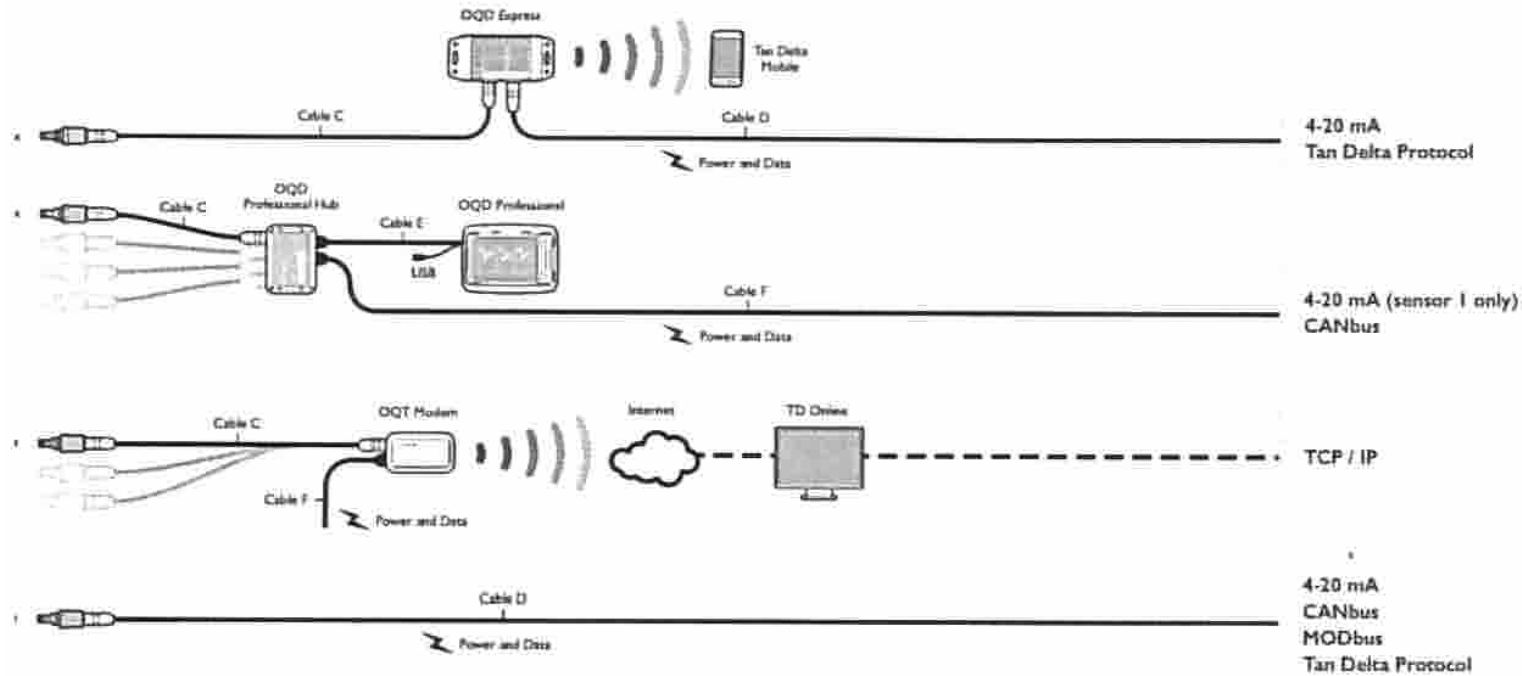


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System Architecture

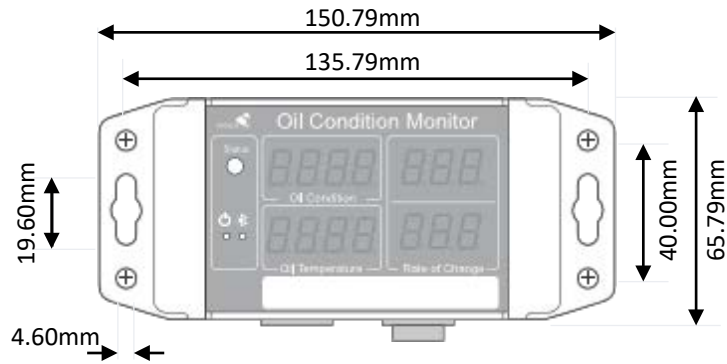
OQDe-A-2-1



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Dimensions

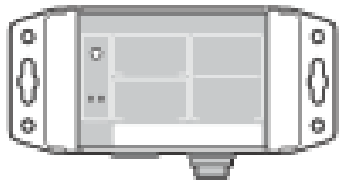


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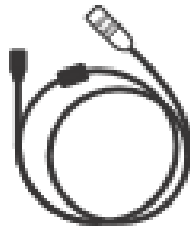


In The Box

OQDe Unit



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