

MIRS8-T / MIRS8-T-V : Oil Condition Monitoring for Turbine/Gear/Hydraulic Oils

Summary Information:

- Inline Mid-infrared Oil Condition Monitoring Sensor
- Integrated into plant equipment lubrication lines.
- Configured for Turbine, gear and hydraulic oil applications.
- Both come with vibration tolerant design (-V) for automotive mobile equipment.
- 8 customised payload channels for mineral based oils (Groups I-III) with longer lifetimes like Gear, hydraulic and turbine oils.
- Optimised to detect discrete changes in the oil, lower additive concentrations and with higher viscosity gear oils.
- Customised to monitor phenolic Anti-oxidants and Phosphorus based Extreme Pressure additives, along with the measurement of standard parameters such as water content, oxidation and acid number.



Product Description:

The MIRS8-T transmission sensor is a rugged and robust industrial sensor that is designed for inline and in-situ oil measurements of industrial fluids. The oil is provided to the sensor via the Swagelok connectors. If required sensor cooling options are also available. This MIRS8-T sensor is configured specifically for longer lifetime oils such as gear oils, hydraulic oils and turbines oils and is more sensitive to the smaller changes associated with such oils. The optimised sensor design allows inline measurement of very high viscosity grade gear and can be configured for automotive mobile equipment with MIRS8-T-V variant for vibration tolerance.

The sensor can be part of the fieldkit system or a stand-alone device and the data can be sent to a cloud server complete with dashboard process control charts or sent to a customer database or read directly via the embedded predictor.

The sensor mounting is flexible and can be adopted to the specific application. Air bubbles in the oil do not cause an issue for our sensor technology. Ideally the sensor should be mounted directly after an oil filter in a bypass system.

Specification of the MIRS8-T Sensor:

- Dimensions: Ø x H / 75 X 60 mm
- Weight: 1200 g
- Housing material: Stainless steel/ Aluminium
- Communication interfaces:
 - USB + Ethernet
 - USB + RS232
 - USB + CANopen or CanJ1939
- Standard Operating voltage: 5-12V
- Optional up to 24V
- Oil Temperature: <70 ° C
- Option for 100° C
- Connector: Swagelok 6mm
- Max sample pressure: 15 bar