

MIRS8-T / MIRS8T-V: Oil Condition Monitoring for Group V oils

Summary Information:

- Inline Mid-infrared Oil Condition Monitoring Sensor
- Integrated into lubrication lines
- Configuration for Synthetic oil types in Group V such as Phosphate Ester, Polyolester, PolyAlkylene Glycol (PAG)
- Comes with vibration tolerant design (MIRS8T--V) for automotive mobile equipment.
- 8 customised payload channels for Group V oils used, for example in fire retardant applications in compressors and jet engines.
- Customised to monitor discrete chemical changes such as phenolic alcohol and organic acid through hydrolysis of the base oil. Monitors acid number and water content.
- Longer pathlength (big film thickness) for discrete changes as seen with Group V oil degradation.



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 Synthetic oil types in Group V such as Phosphate Ester, Polyolester, PolyAlkylene Glycol (PAG), has a longer pathlength optimized for discrete changes in the oil condition 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