

# MIRS Product Range: MIRS8-T

## Summary Information:

- Mid-infrared spectral sensor
- OEM products for Industry 4.0
- Integration into customer products/processes
- Transmission Platform
- 8 customised payload channels



## Product Description:

The MIRS8-T transmission sensor is a rugged and robust industrial sensor that is designed for inline and in-situ sample measurements of, for example, engine oils or other industrial fluids. The MIRS8-T is a sensor platform and will be configured by Spectrolytic depending on the application and the customer's requirement.

The sample is provided to the sensor via the Swagelok connectors and the additional nozzles seen in the images are used for cooling/heating the sensor if required.

The MIRS8-T can be configured to either transmit the raw sensor data or to provide fully calibrated data. In the latter case the data processing is carried out on the sensor unit itself using the embedded predictor.

The MIRS8-T uses an M12 connector for power and communication and the detailed pin configuration of this connector has been provided below.

The sensor can be mounted either vertically or horizontally. Ideally the sensor should be mounted directly after an oil filter to ensure that no particles >50µm are entering the sensor. Particles entering the sensor can potentially cause clogging of the sensor flow cell.

## Specification of the MIRS-A Sensor:

- Dimensions: Ø x H / 75 X 60 mm
- Weight: 1200 g
- Housing material: Stainless steel/ Aluminium
- Communication interfaces: USB and Ethernet, or CanOpen
- Operating voltage: 12V
- Sample Temperature: <70 ° C
- Sample connector: Swagelok 6mm
- Mounting holes: M4 with a depth of 8mm
- Max sample pressure: 15 bar

| PIN | DETAIL          |
|-----|-----------------|
| 1   | ETH_TX+/CAN_H+  |
| 2   | ETH_TX-/CAN_L   |
| 3   | ETH_RX-/SER_RX  |
| 4   | USB+            |
| 5   | USB -           |
| 6   | ETH-RX-/SER_TX+ |
| 7   | 12V             |
| 8   | Ground          |