

# TRM Sensors LLC Data Sheet

## TRM-to-SIM Adapter

### Product Description

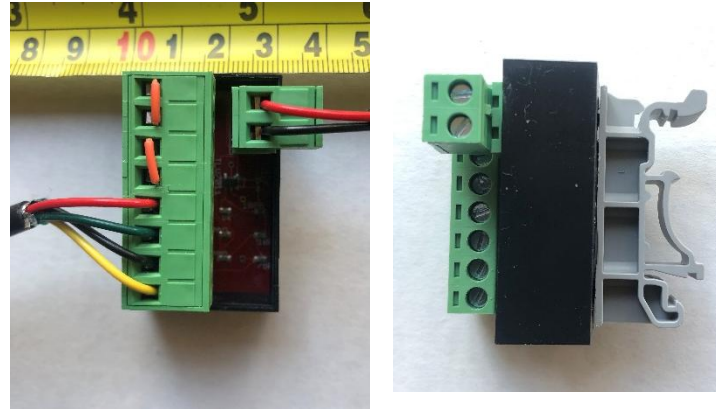
**TRM-to-SIM Adapter** is a small DIN rail mounted module that allows select TRM fuel and oil sensors to be monitored by standard TraceTek instrumentation such as the TT-SIM family.

The **Adapter** can connect **TRM-DFS-3** Indoor fuel sensors, **TRM-CC** outdoor hydrocarbon sump sensors or **TRM-IOS** indoor sensors for hydraulic oil, mineral oil and lube oil to the standard four wire TraceTek input circuit used by TraceTek's TTSIM-1, TTSIM-1A, TTSIM-2, etc. The adapter is needed because of the inherent differences in the sensor technology used by the two systems. TraceTek monitor devices like the TTSIM assume that a high resistance sensor is normal while a transition to a low resistance state indicates a leak detection. TRM sensor probes operate in the opposite sense in that they are at a lower resistance when normal and transition to a higher resistance when in contact with hydrocarbons and certain industrial oils.

TRM-SIM Adapter is an ultra-low power device and does not require an external power supply. Its operating power is taken from the same intrinsically safe voltage and current source that is used by the TTSIM for standard leak detection cable monitoring. In fact, up to five of the TRM-SIM Adapters can be daisy chained to a single four wire TTSIM sensor cable circuit allowing a single TTSIM to monitor up to five TRM probes. Built in "location resistance" allow each Adapter to mimic 10m of sensor cable so a leak detected on the first adapter appears as if it at the 10 meter location while a leak detected at the second adapter would appear to be at 20 m . etc.

### Key Features

- Small DIN rail foot print
- Ultra-low power, no external supply needed
- Connects to TTSIM using standard four wire circuit
- Can connect TRM-DFS-3, TRM-CC or TRM-IOS
- Up to five TRM-SIM Adapters can be monitored by a single SIM with 10 m location resistors built in.



### Product Specifications

- Power Source: Powered directly from TTSIM sensor cable drive circuit
- "Leakage Current" draw in normal state: <15 uA
- "Leakage Current" draw in leak state: > 250 uA
- Compatible TRM sensors: TRM-DFS-3, TRM-IOS, TRM-CC
- Daisy chain up to 5 Adapters to single SIM
- Internal "location" resistance equivalent to 10m of sensor cable to identify source of alarm in multiple-probe installations.
- 8 position detachable terminal block for connection to TTSIM and next Adapter
- 2 position detachable terminal block for TRM sensor connection
- Dimensions (with DIN rail clip): width 40 mm, height: 45 mm, depth 50 mm
- Epoxy encapsulated circuitry in UL94 rated shell
- Weight: 40 g
- Operating Temperature: -13°F to 131°F (-25°C to +55°C)
- Relative Humidity 5% to 95%, non-condensing
- RoHS compliant