

### **Condition Monitoring Application Guide**

# Earth Leakage/Ground Fault



## **System Overview**

TrackSense is designed with your organization in mind. Unlike expensive, rigid systems, it offers an affordable, modular solution which is compatible with off-the-shelf sensors, enabling you to select the tools that best suit your needs. With a user friendly interface that streamlines daily tasks, TrackSense promises to deliver lasting value and support long after your purchase. TrackSense can monitor key performance data for any rail asset, including:

















Earth Leakage/Ground Fault Detection Monitoring

Earth leakage monitoring is best achieved by using the TrackSense Earth Leakage Detector Module, which detects abnormal currents flowing to the ground, typically from insulation failure. The waveform produced from monitoring provides a clear indication of leakage levels and insulation health.

User-set thresholds trigger alarms when waveform values exceed safe limits, indicating insulation breakdown, moisture ingress, or wear in the electrical system. Monitoring earth leakage ensures electrical safety and prevents hazardous conditions and costly downtime.

#### Minimum Requirements

1x TS Logger Module

- Collects data for analysis

1x TS Earth Leakage Detector - 1 busbar input channel

### Contact Us

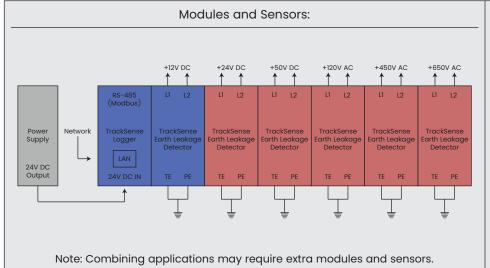
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## Wiring Block

Below is an example wiring block. Wiring in practice may vary depending on circumstances.



#### Notes:

Modules in blue are required Modules in red are optional

Some sensors will be available with 4-20mA, Modbus, or digital outputs. You may select any option at your discretion.

Additional Earth Leakage
Detector (ELD) modules are shown,
to show the busbar voltages that
are possible to monitor. Only one
ELD module is required to monitor
one busbar. Up to 8 ELDs can be
added, to monitor up to 8 busbars.