

EARTH LEAKAGE FINDER (ELF) PROCESSOR

(Part Number H00742)



UTILITY POLE MONITORING

Continuous monitoring of earth leakage through the Protective Earth Conductor

PREDICTING FAILURES

Using Digital Algorithms to predict when the earth leakage is going to exceed the alarm alert level

TILT AND IMPACT ALERTS

Measuring and reporting of the pole vertical angle.

Impact measurement and alerts

INTEGRAL 4G IOT

Integral 4G Modem and Global M2M SIM Card.

INTEGRAL GPS

Data reports include GPS position and date/time stamping of reports

INTEGRAL DATA STORAGE

30GB of integral non-volatile data storage



ELF Processor

Based on the HAYSYS PoleTAC technology, the Earth Leakage Finder (ELF) allows utility companies to monitor the levels of earth leakage flowing through the Protective Earth (PE) conductor installed on their various poles.

The Processor Unit (PU) provides the Telemetry and Communications (TAC) capability that includes 4G Internet of Things (IoT) communications, GPS location fixing and sensor output measurement and interface.

All measurements and configuration of the individual processor units are controlled via settings available on the ELF Data Portal. The portal also provides graphical visualisation of the data.

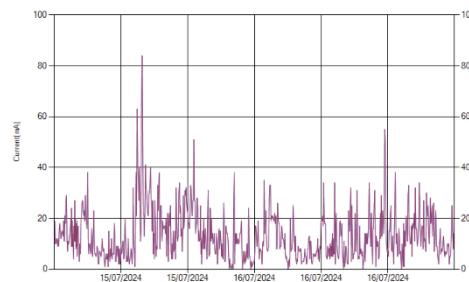


Chart and Samples Date Filter Date From: 15/07/2024 12:00:00 Date To: 16/07/2024 12:00:00

The ELF using digital algorithms to measure and predict when the earth current level is going to exceed the set alarm level, providing utility companies with the ability to perform planned maintenance.

The Processor also measures the tilt angle of the pole it is attached to, along with any force exceeding the set thresholds.

Settings on the data portal include:

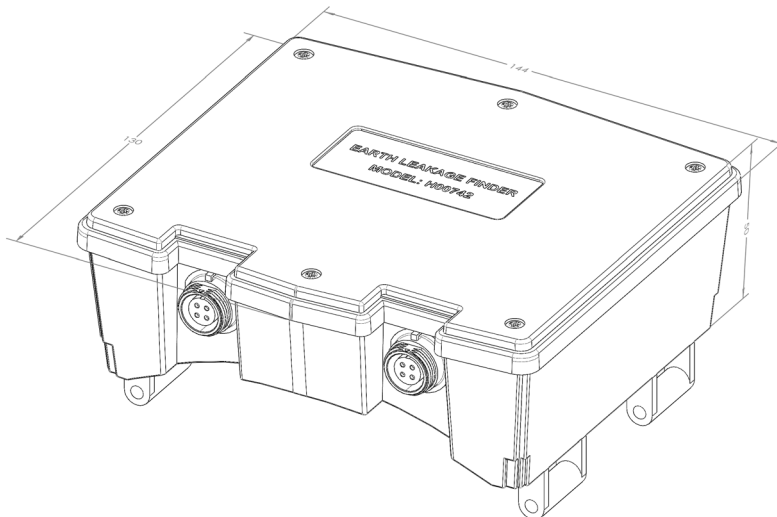
- Predicted Leakage Alarm Alert level
- Sampling Rate
- Upload Rate
- Tilt Angle
- Impact Alarm threshold
- Alert email addresses

The ELF Processor is self-powered from a supplied Solar Panel that maintains the charge on the internal rechargeable battery. The battery charge indication is also provided to the ELF data portal.



Specifications

ELF PROCESSOR



Dimensions	130mm x 144mm x 50mm
Weight	1Kg
Fixing	Suitable for mounting on standard utility poles or flat surfaces - Banding or screwed using supplied P-Clips and screws
Connections	1. Power connector (from Solar Panel) 2. Sensor connector (to supplied Split Core Current Transformer)
Operation	Connecting the Solar Panel powers on the Processor. Disconnecting the Solar Panel powers off the Processor.
Communications	Integral 4G Modem and Global M2M SIM Card
Position Fixing	Integral GPS
Power	Integral rechargeable battery (4 volts)
Ingress Protection	IP68
Case Material	Flame Retardant Polycarbonate (UL-94 V0) UV Resistant
Colour	RAL 7031
Operating Temperature Range	-40°C to 85°C

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