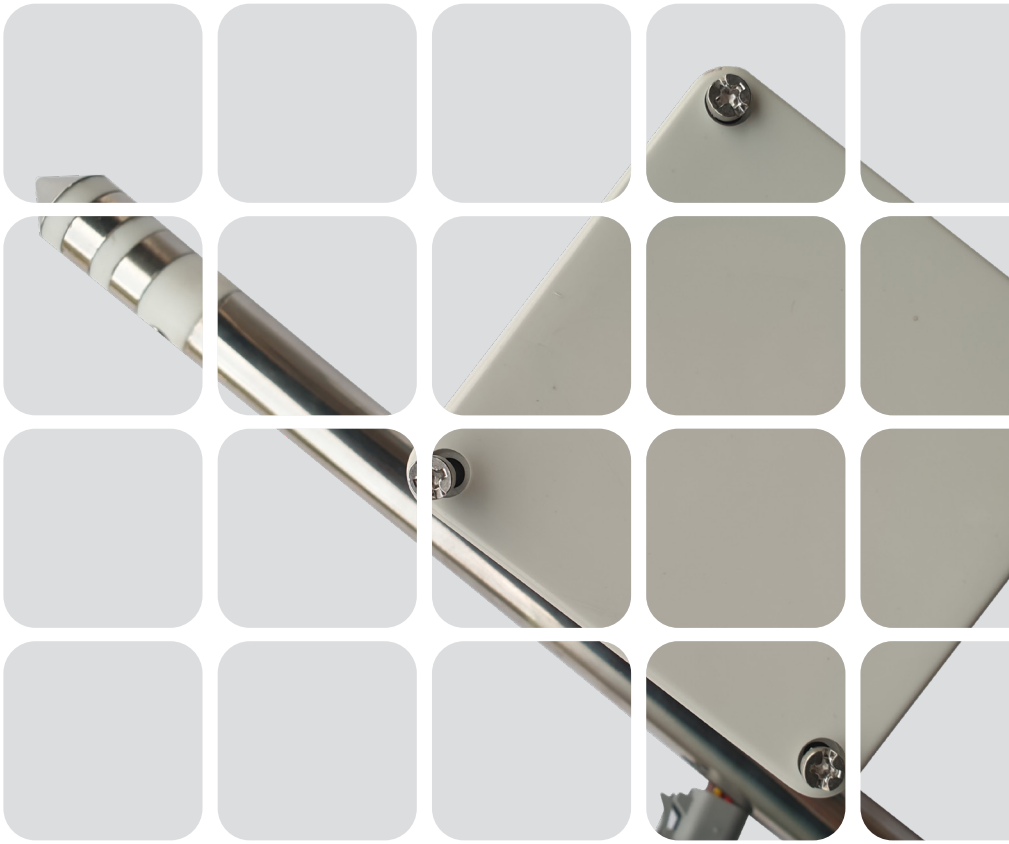
MANAV ENERGY

DELIVERING RELIABLE TOMORROW



R-FERM SYSTEM

REMOTE FAULT-TIME EARTH RESISTANCE MONITOR

GUARANTEED TECHNICAL PARTICULARS

ANY TIME
ANY WHERE

Accurately designed and functionally maintained earthing system is an imperative need in the electrical safety & reliability segment. These systems protect lives, livestock, and assets from fatal accidents and irrevocable damage caused during high-intensity operational faults and high energy dissipation.

Remote Fault-time Earth Resistance Monitor (R-FERM) is an IIoT system that works on advanced patented technology. This next-gen product transposes manual monitoring of the earthing system to an automated online monitoring network.

DIGITALIZING ELECTRICAL EARTHING FOR A SAFER TOMORROW

Manav Energy has indigenously developed R-FERM, which is capable to automate earthing system measurement and maintenance practice

PREVENTION IS BETTER THAN CURE

R-FERM provides the ability to prevent accidents caused by unhealthy/faulty earthing system by monitoring of individual earth pits.

FAULT ALARM SYSTEM

On the occurrence of fault, the concerned person is notified. The behavior of the earth pit during fault conditions can be observed. If any discrepancy is found, corrective actions can be taken immediately.

DATA ACCESS AND ESCALATION

The system consists of 3 level hierarchy allowing the higher levels to supervise the lower-level data. If the initial level supervisor does not take action in the set time, the higher-level supervisor is notified for corrective measures.

REDUCED TIME AND EFFORT

Manual measurement of an earthing system consumes high effort, time and money. R-FERM digitalized concept reduces time and effort and provides an automated system for maintenance.

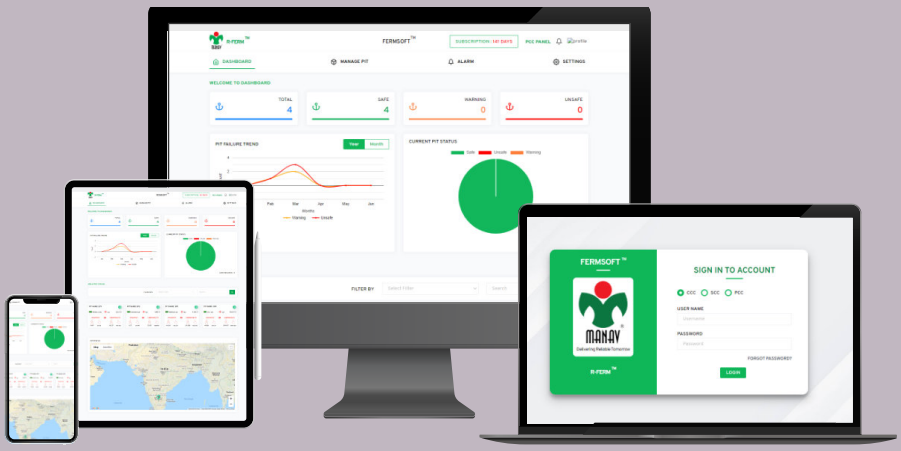
FERMTALK

Fermtalk is the hardware used for continuous monitoring and predictive maintenance of each earthing system. It consists of two components.

COMBYTE | DATABEE

FERMSOFT

Fermsoft is a web application that allows users to view data and take necessary action to maintain their earthing system. In addition this application comes with relevant security features, a cloud storage facility, and a user-friendly interface to monitor and analyze data.



FERMTALK

DATABEE

Databee is a sensor that measures the earth pit resistance. It is connected to the Combyte to share its measured value.

These sensors are placed inside the earth-pit for accurate measurement.

SPECIFICATION

Power Supply Voltage	3.3 V
Current Consumption	50 mA
Product Dimension	Length : 650 mm |Diameter : 19 mm
Ambient Operating Temperature	0 to 70 ºC
Material	SS316L
Net Weight	680 g

SPECIFICATION

Power Supply Voltage	3.6 V
Current consumption	120 mA
Product Dimension	75 x 80 x 75mm
Ambient Operating Temperature	0 to 50 ºC
Enclosure	IP68 / Flameproof
Net Weight	465 g
Battery	3.6V | 19Ah
Frequency Rage	865-867MHz

*ip68 -The device is designed to withstand immersion in water up to a depth of 1 meters for 30 minutes, making it suitable for use in wet and dusty conditions

COMBYTE

This device is placed next to Databee. It sends the data received from the Databee to the cloud server through Inheed. In simple terms, it is connected to both Databee and Inheed 24/7. It works on a battery and does not require any power supply. Its battery life span is up to 1 year.

FERMSOFT

ALL IN ONE APPLICATION

Fermsoft stands for Fault-time Earth Resistance Monitoring Software. It is a web application used to gather information from the Fermtalk located at the remote sites, analyze the collected data and display the result at a central network for control & monitoring purposes.

MEASURE STEP AND TOUCH VOLTAGE OF INDIVIDUAL EARTH PITS

FAULT-TIME DETECTION AND MEASUREMENT OF EARTH PIT RESISTANCE

ALERT SYSTEM FOR INCONSISTENCY IN EARTHING

COMBYTE BATTERY MONITORING SYSTEM

PCC : PERIPHERAL COMMAND CENTRE

PCC roles are assigned to users responsible for a group of earth pits . It is the lowest level in the system hierarchy. In this role, data from a specific area is analyzed and viewed.

SCC : SUPERVISORY COMMAND CENTRE

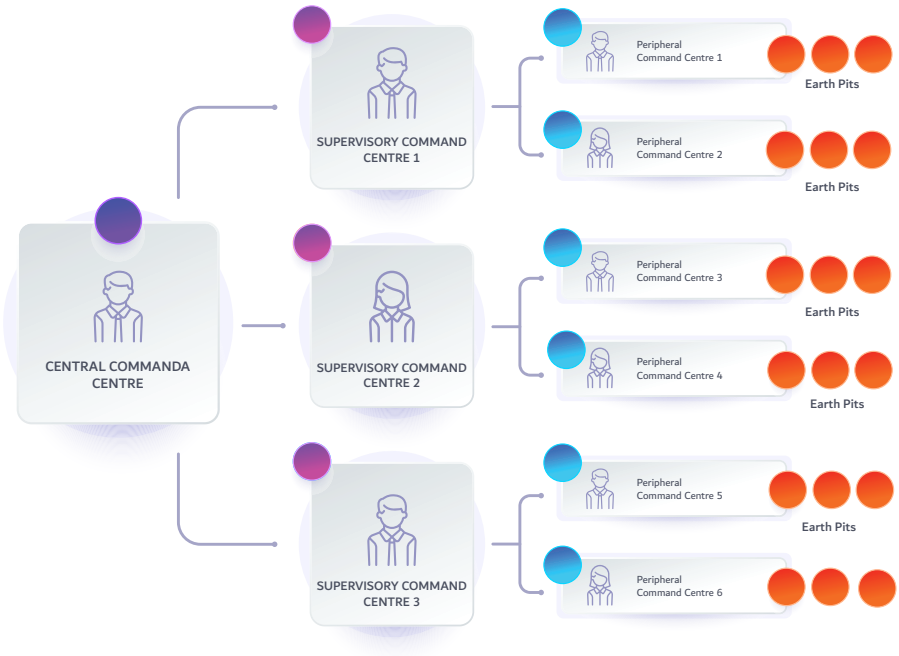
SCC roles are assigned to Area Heads. It is the mid-level in the system hierarchy. In this role, data from multiple PCC units are analyzed and viewed.

CCC : CENTRAL COMMAND CENTRE

CCC role is assigned to Plant/Unit Heads. It is the highest level in the system hierarchy. In this role, data from all SCC units are analyzed and viewed.

Fermsoft uses role-based platforms to analyze and view data. Each role has a hierarchy and is shown on the left-hand side.

Alert System also uses the role-based model to generate and escalate alerts.



EMAIL

You can drop an e-mail to resolve any hardware or software queries at **FermSofthelpdesk@manavenergy.com.**

ON-SITE MAINTENANCE

If the technical help desk cannot resolve the issue, Manav Energy offers an on-site repair service.

PICK-UP SERVICE

In circumstances where hardware component/s may need replacement or off-site repair, we provide door-to-door service.

SUPPORT

We have a dedicated support team to guide and help with any correction or repair. Our post-installation support staff can be contacted using any one of the methods as mentioned.

www.manavenergy.com

MANAV ENERGY PVT. LTD.
#28,PUNARVASU, 1st and 2nd Floor, E End Main Road, 4th "T"
Block, Jayanagar, Bangalore – 560041, India.
Tel: +91-8026546549,
Mob: +91-9611378007