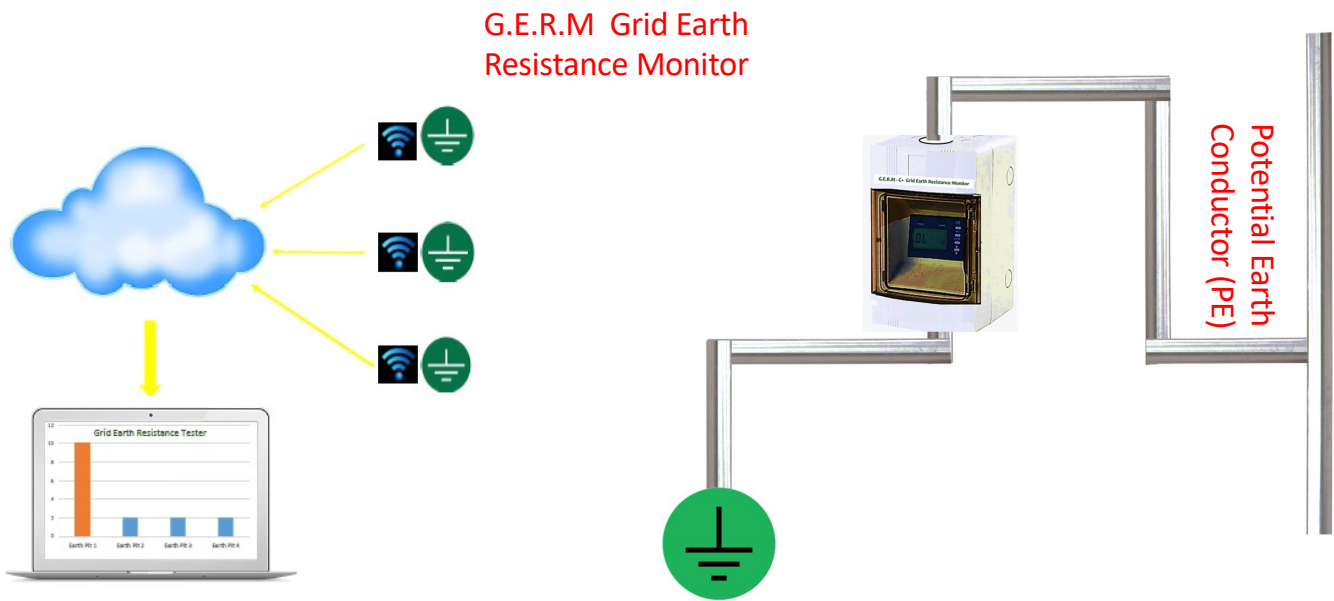


# KPM G.E.R.M Grid Earth Resistance Monitor

KPM G.E.R.M Grid Earth Resistance Monitor is for on-line monitoring of grounding system. The detector adopts open-contact CT and is based on non-contact measurement technology. The grounding strip directly penetrates through GERM and installation can be done without disconnecting the conductor. GERM can be installed in Rain and dust proof structures.

GERM is an all in one system to ensure the reliability of critical earth pits. G.E.R.M consist of a display and an alarm function, user can set the alarm threshold as per system requirement, when the ground resistance value is greater than the set threshold, the alarm light will flicker. G.E.R.M can be monitored real time via its RS232/RS485 interface.



**A State of Art Device for online monitoring the health of your critical Earthing System**

## Grid Earth Resistance Monitor ( GERM )


Grid Earth Resistance Monitor (Germ ) is an state of art device which continuously monitors the earth value of the Earth Pits and raises an alarm whenever it detects any fault .

GERM can also measures the Temperature & Humidity Data of the site & find the relation between variation of earth pit resistance w.r.t. the environmental parameters with the help of optional accessories.

All the information from the site are securely sent to the server via advance communication methods .

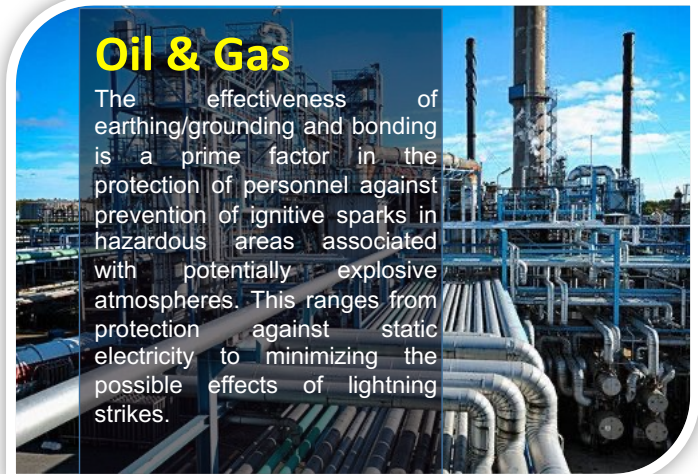


# KPM G.E.R.M Grid Earth Resistance Monitor



## Solar PV Plants

Proper grounding of a photovoltaic (PV) power system is critical to ensuring the safety of the public during the installation's decades-long life. The basic PV module can produce potentially dangerous currents and voltages for the life of the system. Effective, code-compliant, properly maintained grounding helps to ensure the overall safety of the system.



## Oil & Gas

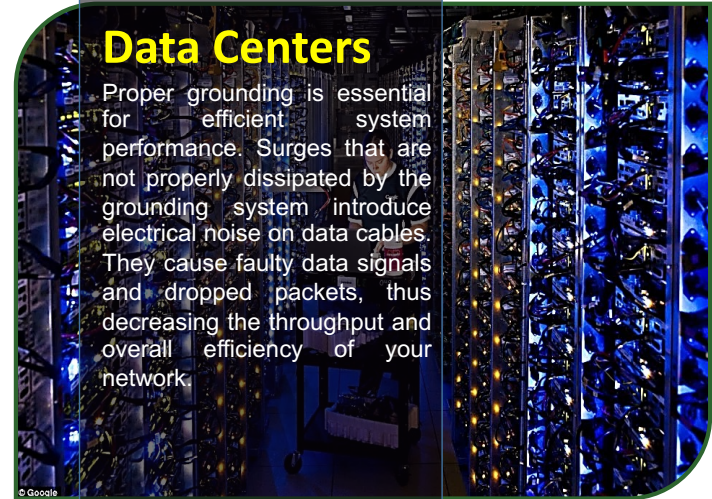
The effectiveness of earthing/grounding and bonding is a prime factor in the protection of personnel against prevention of ignitive sparks in hazardous areas associated with potentially explosive atmospheres. This ranges from protection against static electricity to minimizing the possible effects of lightning strikes.



## Aerospace

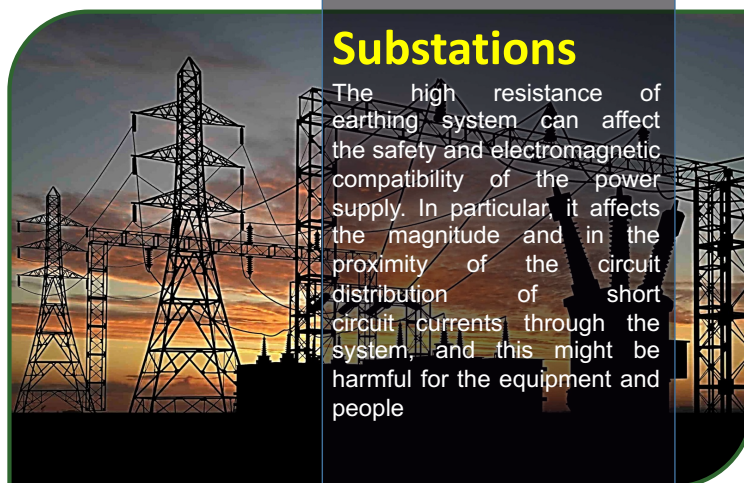
Launching pads are Generally located in parts of the earth globe where lightning activity is strong,

Grounding system is a critical point of the launch pad lightning protection system. Indeed, if one wishes to minimize the overvoltage induced by the lightning current, the ground connection must have low impedance.



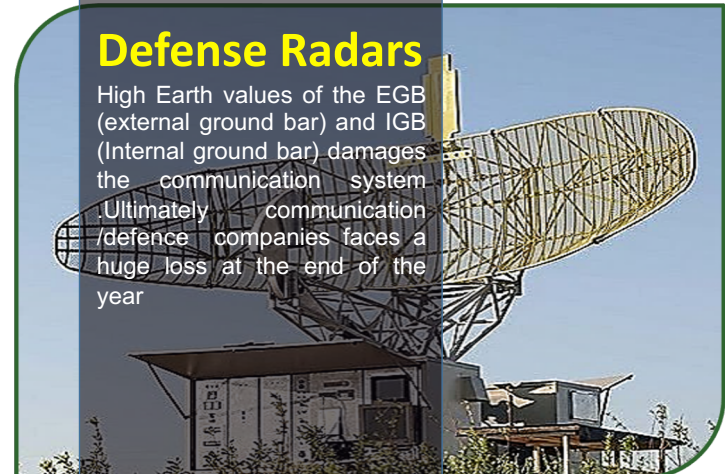
## Data Centers

Proper grounding is essential for efficient system performance. Surges that are not properly dissipated by the grounding system introduce electrical noise on data cables. They cause faulty data signals and dropped packets, thus decreasing the throughput and overall efficiency of your network.



## Substations

The high resistance of earthing system can affect the safety and electromagnetic compatibility of the power supply. In particular, it affects the magnitude and in the proximity of the circuit distribution of short circuit currents through the system, and this might be harmful for the equipment and people



## Defense Radars

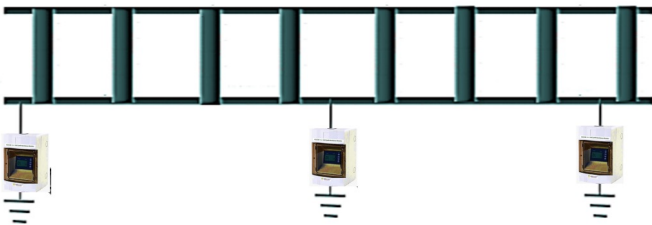
High Earth values of the EGB (external ground bar) and IGB (Internal ground bar) damages the communication system. Ultimately communication/defence companies faces a huge loss at the end of the year



# KPM G.E.R.M Grid Earth Resistance Monitor

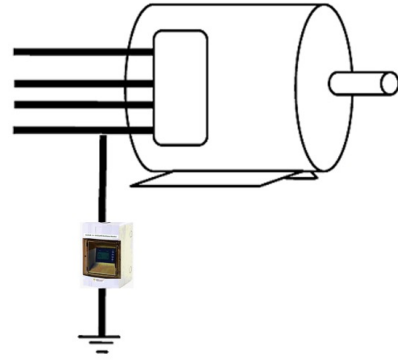
## Application Diagrams:

### Railways:



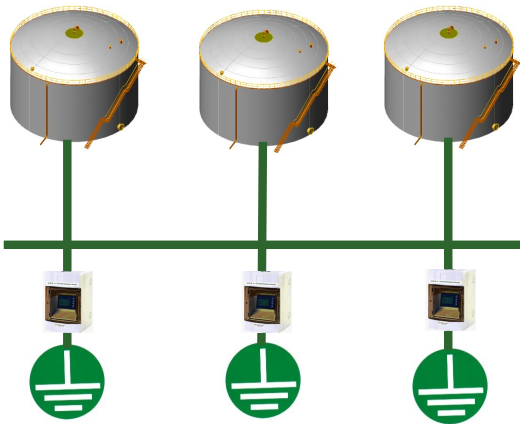
Railway Tracks

### Generation:

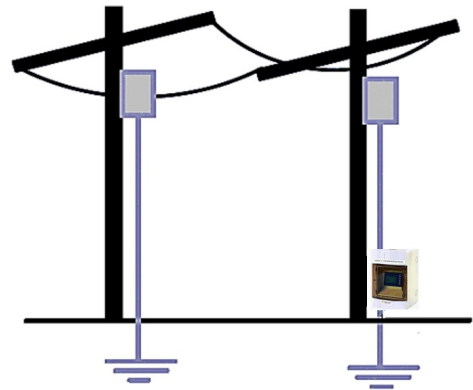


Power Generator

### Oil and Gas:



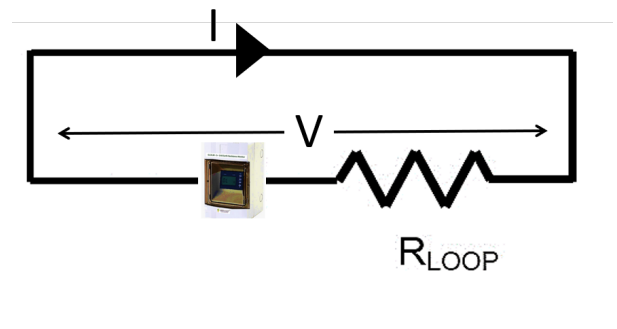
### Transmission:



Transmission Lines

## Principle of Operation:

KPM G.E.R.M, Grid Earth Resistance Monitor can measure the effective earth resistance correlation & provide user an accurate idea about increasing / decreasing trend of earth resistance value for their protected objects. Based on site requirement monitoring is based on Clamp/Electrode methods of earth resistance.





# KPM G.E.R.M Grid Earth Resistance Monitor

## Technical Specification:

Power supply	DC 6V ~ 9V, 50mA Max. (External power supply)
Range	0.01Ω ~ 100.0Ω
Resolution	0.001Ω
Accuracy	± 2% rdg ± 3dgt (20 ± 5) ° C, 70% RH or less
Automatic shut-down	Do not shut down automatically
Power consumption	≤50mA
Working environment	-20 °C ~ 55 °C; 20% rh ~ 90% rh
Store the environment	-20 °C ~ 60 °C; 90% rh or less
Enclosure	Indoor ( Aluminium Finish ) , Outdoor ( Powder Quoted )
Communication	Cable ( Upto 70 Mts. max. Shielded as per site requirement )
Alarm	Audio Visual
Soil Moisture Measurement	Optional
Temperature Measurement	Optional



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