



Electrical Grounding & ESD Safety Monitoring System

Product Overview

Electrical Grounding & ESD Safety Monitoring System proactively alerts and prevents damages to the critical infrastructure. The System monitors and measures electrical ground connectivity & its resistance, to indicate presence of a safe path for the dissipation of fault currents that occur during events like lightning strikes, poor grounding & static discharges. RDL's Cutting -Edge solution maintains the critical equipment & machinery uptime, Ensures compliance to electrical safety standards in potentially hazardous environments & static protected areas.

ESD safe path for the dissipation connectivity requires focused monitoring as it can cause harmful impact to the work environment, including explosion in gas, flammable vapor and coal dust, as well as failure of solid state electronics components such as integrated circuits.

Application

- Coal mining, Oil and Gas industry
- Fueling Station
- Automotive Paint shop
- Broadcast and RADAR, satellite relay station
- Power Grid & Substations
- Manufacturing Industry
- Testing, R&D Lab and Hospital
- Cell phone tower sites.
- Data Center

Advantages / Operational Benefits

1. Equipment & machinery Uptime
2. Fire and safety compliance
3. Equipment protection
4. Real time Alerting system
5. Predictive Analytics & ROI

Unique Features of the System

- Alerting with Fault Location
- Accurate Earth resistance measurement
- Bonding & Grounding Connectivity status
- Electrical grounding history with fault Prediction
- Outage of Primary ground connection it automatically select Alternate Ground Source
- Grounding System Maintenance Alert
- Supporting for wide range of communication protocol - MODBUS TCP /RTU, JSON, MQTT, FTP



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Use case :

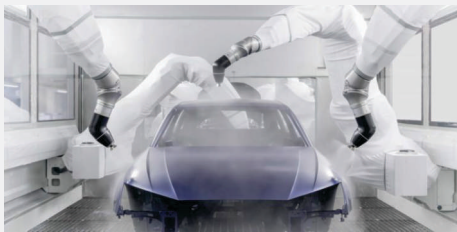
Testing Lab & Hospital



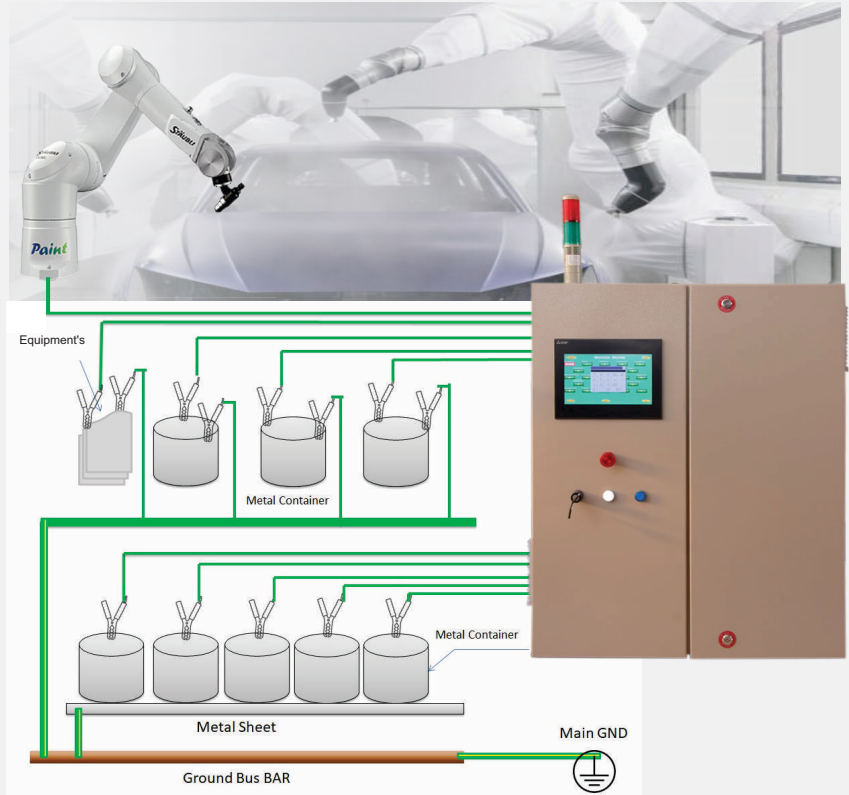
Oil and Gas Refineries



Automotive Paint Shop



Fueling Station



Description	Specification
Product Name	Electrical Grounding and ESD Safety Monitoring System
Make	RDL
Model	RDL10500
Measuring Range	0-100mV and 0-20 mA
Accuracy	+/- 0.5%
Isolated Line Field Current (0.5 ohm to 5 Ohm Earth resistance)	Min : 3.7mA @ 0.5 Ohm Max: 4mA @ 5 Ohm
Isolated Line Field Voltage with Earth 0.5 Ohm to 5 Ohm resistance	Min : 2.6mV @ 0.5 hm Max: 18.6mV @ 5 Ohm
MAX Energy	Less than 1 micro Joules
Internal DC Power Supply	24V
Response Time	100 microSec
No channel	100
HMI with Touch Screen	14 inch
Communication Protocol	Modbus TCP, MODBUS RTU, JSON, MQTT, FTP & SFTP
Communication Interface	Ethernet 10/100 Mbps, RS485, WiFi, GPRS / 4G
Power Supply	110/240v 50/60Hz 4Amps