



Unparalleled Protection



- Ground faults cause havoc on plant production processes, shutting down power and equipment and critical loads.
- Ground faults disrupt the flow of products through manufacturing processes and cause data loss in computer centers leading to hours or even days of lost productivity.
- Ground faults pose health and safety risks to personnel, creating hazards such as equipment malfunctions, fire and electric shock.

SLEUTH

HIGH RESISTANCE GROUNDING SYSTEMS

The Sleuth is a neutral grounding device that limits ground fault currents to non-damaging levels under a single line-to-ground fault condition. Sleuth is the ideal tool for sensing and locating ground faults quickly and easily. When a ground fault occurs, Sleuth controls and limits the fault current, provides an alarm that indicates an active fault, enabling electrical personnel to follow a simple sequence to locate and isolate the fault without interrupting the circuit or opening circuit breakers.

High-Resistance Grounding (HRG) is becoming more prevalent in industrial and commercial electrical power systems because it eliminates unscheduled downtime due to ground faults, and improves personnel safety by preventing ground faults from escalating into arc-flash incidents. Resistance grounding is highly recommended for generators, to protect them from damage due to excessive ground fault currents.



SLEUTH

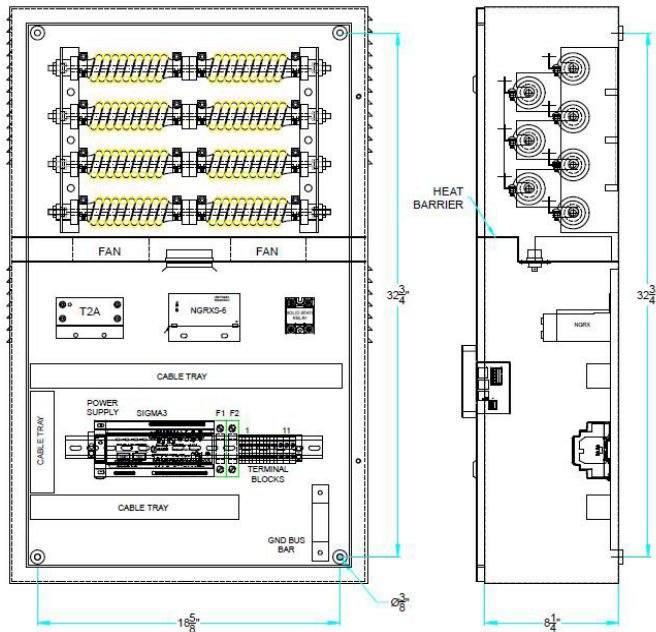
- NEMA 2R enclosure containing current limiting resistor and ground fault relay. NEMA 3R enclosure available
- Available with artificial neutral for use on delta systems
- Visual indication of system normal, active ground fault and pulsing active via I-Gard new touchscreen display
- Available for 480V, 600V and 4160V distribution systems
- UL Certificate of Compliance. *Pulse Grounding Fault System, Sleuth*

STEP 1 - In protection is to limit damaging fault currents through the use of a High-Resistance Grounding (HRG) system.

STEP 2 - Requires the fault to be located and repaired before a second fault occurs.

The I-Gard Sleuth pulsing system, when activated, will cyclically limit the ground fault current to 100% and 50% of the available ground fault current. The users can modify the duration of this pulse to suit the requirements of their sensing device. The integral pulsing system combined with the hand held current sensor, and a single line diagram can be used to rapidly locate a ground fault even in a very complex power distribution system.

SLEUTH



SIGMA 3-TDM Pulsing Settings screen

SLEUTH HRG - front view and side view
Dimensions (for reference only)

FEATURES	BENEFITS
High-Resistance Grounding Resistor	This resistor is connected to the wye point of the transformer or generator supplying the facility. Its function is to limit ground fault currents to non-damaging levels under a single line-to-ground fault condition. This provides the user an opportunity to retain process continuity and to detect and clear the fault.
Hand Held Pulse Tracing Sensor	This device, similar to a clamp-on ammeter, allows the user to follow the pulses from their source at the Sleuth unit through to the specific location of the line-to-ground fault.
Automatic Pulsing System	Once the pulsing feature on the Sleuth system is selected and activated, the system will cyclically limit the fault to 100% and 50% of the available ground fault current. The cyclical pulsing combined with the hand held pulse tracing sensor empowers the user to trace the fault circuit to the point of the fault in even complex distributions systems without de-energizing the load.
SIGMA 3 Ground Fault Relay	SIGMA 3 Ground Fault relay measures the current through the resistor, compares the values with the fields settings of the relay and provides the indication means when an abnormal condition is detected.
SIGMA 3-TDM Touchscreen Display & MODBUS TCP/IP communication	Touchscreen Display Module - Advanced HMI for direct access to set-up and controls, pulsing activation function for locating the fault, event logging capabilities, Ethernet and serial communication available, on board troubleshooting guides. SIGMA 3-TDM provides a simple yet intuitive interface that creates a seamless user experience by guiding users through its advanced features.

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