



*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.

## SENTINEL

The Sentinel is designed to detect the event of a single ground fault, signal an alarm, and point to the affected branch or feeder. Thus maintenance can be immediately alerted to the problem and an operator dispatched to locate the fault to isolate it promptly.

The Sentinel system can assist in locating the fault with a pulsing fault location circuit. In the event of a second ground fault, the Sentinel acts quickly to prevent loss of two feeders by selectively tripping the lower priority feeder only.



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Nema 3R enclosure containing current limiting resistor and ground fault relay and isolation switch

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Multi-feeder ground alarm indication with double ground fault protection

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Integral resistance pulsing and MODBUS TCP/IP communication for remote monitoring

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Inrush detection restraint prevents nuisance tripping on high inrush loads

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Arc Flash Detection Module - embedded in the HRG box

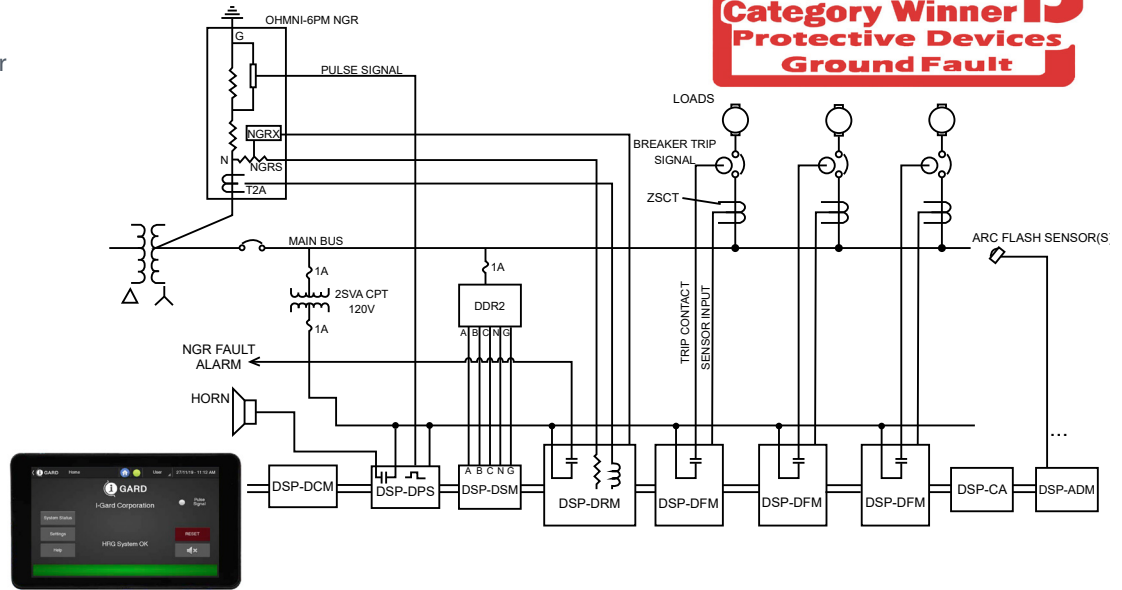
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With its separate easy to read HMI display and modular design, the Sentinel-Ohmni can be expanded to 50 feeders for large installations, each with a dedicated feeder module and sensitive zero-sequence current sensor.

MODBUS TCP/IP communications allows the operator to remotely monitor which feeder has faulted and to monitor the leakage currents of all feeders for trending purposes.



SENTINEL



FEATURES	BENEFITS
Power Requirements	100-240 V, 50/60 Hz or DC, 150 VA
Dielectric	Relay contacts to chassis 1500 Vrms. for 1 minute alarm level
	Control terminals to chassis 1500 Vrms. for 1 minute alarm level
Alarm Level Pickup	50% of system Ground Current IG
Trip Level Inhibit	25% of system Ground Current
Contact Ratings	DSP-DFM Trip Contacts - Form C SPDT 10 A, 240 VAC resistive
	DSP-DPS Alarm Contacts - Form C SPDT 8 A, 240 VAC resistive
Performance	DSP-DFM Pickup accuracy: $\pm 10\%$ of system let-through current Trip Level: 100 A $\pm$ 10 A
	DSP-DSM Alarm Level Accuracy: $\pm 10\%$ of IG
Temperature Range	Operating temperature 0°C to 50°C
Standards	CSA File number LR65287 UL Listing E232710

High-Resistance Grounding (HRG) is becoming more prevalent in industrial and commercial electrical power systems because it eliminates un-scheduled 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.