

GRID ALERT

The ability to corroborate data is invaluable, and yet just one of the benefits of Grid Alert.

Dirty Power is one of the leading causes of unscheduled downtime in an industrial setting, and a highly automated factory is all-the-more hyper-sensitive to these issues. 98% of all Dirty Power events are voltage sags lasting less than 2 seconds. In situations such as these, it is critical to know the root cause of every downtime event and more importantly whether it is a local problem or something that happened outside of their plant. To get your equipment back online quickly, and know that your equipment did not create the dirty power that caused the unscheduled downtime are some of the invaluable benefits of Grid Alert®.

Grid Alert Reports

Immediate Notification

Immediately following a voltage event, all users on the notification list will be emailed a rich text notification providing specifics about the event that just occurred.



I-Sense Location Information

- I-Sense Name (Defined by Customer)
- Location in Facility
- Serial Number
- Owner Name
- Company Name
- Address of Installation

Event Information

- Event Start Time
- Duration of the Event
- IEEE Classification of Event
- Frequency Measured at time of Event
- Nominal/Min/Max RMS Data
- Weather During Event

Charts

- Sinusoidal Waveform
- RMS Voltage Chart During Event

Notes

- Utility for entering information on the "cause and effect" of the event

Industries Currently Using Grid Alert :

Automotive

Semiconductor

Food & Beverage

Healthcare

Utilities

Data Centers

Pharmaceutical

Water/Wastewater

Pulp & Paper

Petroleum

Municipalities

Printing

Chemical

Distribution Centers

Construction

Aviation

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Corroboration Report

If other I-Sense Voltage Detectors detect the same event, a rich text email will be sent to all users on the notification list approximately 1 hour after the event. This report provides detailed information on the severity of the event as seen by other sensors in your area. A corroborated report confirms the event is grid-based.

NOTE: A corroboration report requires that more than one monitor at different locations with different owners was triggered by the same event.



I-Sense Corroboration

Title that provides a list of the number of I-Sense Detectors that recognized the same event

Summary

I-Sense Name (Defined by Customer)

Location in Facility

Address

Event Start Time

Event Duration

IEEE Event Classification

Corroboration

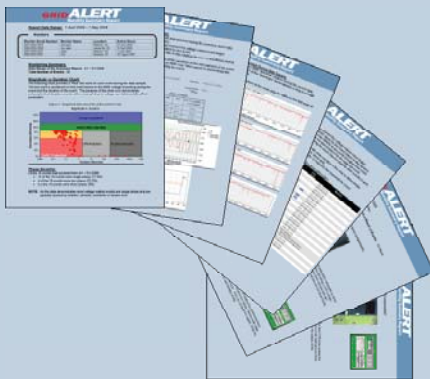
Table providing the distance and severity of the event as recognized by each of the detectors in your area (color-coded to demonstrate severity)

Notes

If "cause and effect" information was provided after receiving the Immediate Notification email, this information will be displayed

Summary Report

A user-customized monthly, quarterly or annual report containing a summarization of the data acquired by any or all owned I-Sense detectors.



List of I-Senses in Report

Table providing the Serial Number, I-Sense Name, Location, and Startup Date

Magnitude vs Duration Chart (Mag/ Dur)

Chart providing a tick mark for each event based on remaining voltage (y-axis) and duration (x-axis) of each event for all detectors in the report

[NOTE: This chart is color-coded to demonstrate severity and concentration of events]

Phase Severity

Table that provides a percentage breakdown of all single phase, two phase and three phase events

Event Waveform & RMS Chart

- Event Information (Start Time, Duration, Frequency, IEEE Classification and Nominal Voltage)
- RMS Summary Chart (Nominal/Min/Max/ Avg Chart)
- Sinusoidal Waveform
- RMS Voltage Chart During Event

[NOTE: Only the most severe voltage sags will be provided]

RMS Capture During Date Cycle

Provides an icicle chart demonstrating the severity of each voltage related event throughout the user-defined summary period (for each of the detectors listed in the report)

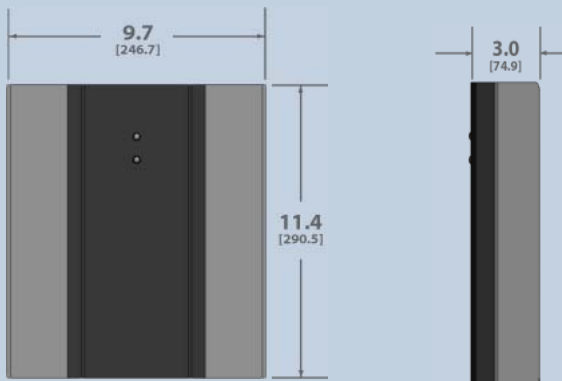
Power Quality Event Log

Table containing the text values for the "Start Time", "IEEE Classification", "RMS %", "Duration", "Weather", "Grid Corroborated Event", "Detector"

i-Sense



Dimensions



Technical Specifications

Electrical Specifications (Typical)*

Voltage Ratings	26 User-Selectable Voltages (100V-480V, 3-Phase)
Frequency	50/60 Hz auto-sensing
Phase Measurement	1-6 Channel Phase Measurement (Single or 3-Phase Configuration)
Accuracy of Measurement	Typically +/- 0.2% of full scale Maximum +/- 1% of full scale True RMS computation
Sampling Rate	32 times per cycle for each phase (3X over-sampling)
Event Detection Criteria	RMS voltage deviation <87% or >115% of nominal
Data Logging	Adaptive wave shape deviation algorithm Non-volatile memory event storage >300 events (equivalent of >50 days of storage) Periodic min/max RMS voltage data over user-selected periods User configurable event dial-up criteria (modem)
Internal Battery	4 AA Rechargeable Enables communication on sustained power interruption
Recorded Data	32 points per cycle displayed, up to 6 phases Maximum 8 cycles capability (from -1 to +3 cycles at start of event, and -3 to +1 cycles at end of event) RMS voltage throughout event (256 points) Voltage trending history (10 minute min/max/avg)
Event Time Stamping	Synchronized to GMT (NIST reference) Time Stamp Reference Based on SNTP Time Protocol Real Time Clock Individual I-Sense Monitors Synchronized to +/- 0.1 seconds

* Specifications are typical and subject to change without notice due to continuing product improvement programs.

Mechanical (Typical)*

Enclosure	NEMA 1 (IP20), see figures for dimensions (approx.)
Accessibility (Wiring)	Top of Cabinet (punch outs present)
Weight lbs (kg)	10lbs (22kg)
Environmental	
Ambient Temp.	5°-40°C (41°-104°F)
Storage Temp.	-40°-75°C (-40°-167°F)
Relative Humidity	0 to 80% for temps up to 31°C, 50% at 40°
Altitude	2000 m (6,562 ft) without load derating
Communications/User Interface	
User Interface	2 LEDs (Status & Alarm) Relays (In & Out) – available only in V6480B05-x models Input - Trigger a voltage snapshot when desired event occurs Output - Trigger on Event Severity (customizable through I-Grid website)
Communications	Ethernet (10Mbps) Modem (Functional Throughout the World)
Protocols	HTTP, TCP/IP, Ethernet, DNS, DHCP, ICMP, XML data format
Software	
“On-Board Management Console” Configuration Software	
Connect using Ethernet connection Configure communications (Ethernet or Modem) Edit Access Password Define the Nominal Voltage to which the I-Sense will be connected Number of Sensing Channels	
“I-Sense Monitor Discover Utility”	
Used to Search for all I-Sense monitors connected on the existing network	
Compliance	
Agency Approvals	TUV (Certified to UL Standards), FCC, CSA, CE, ICES
Warranty	Standard 1 year

Catalog # System

