inSIGHT™
Data Monitoring Systems

Predict & prevent costly downtime, before it happens

Monitor & Track:
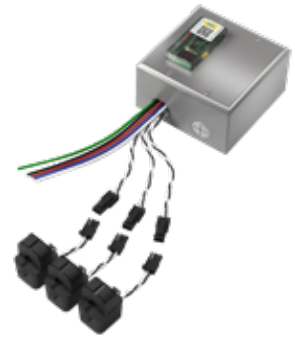Current | Voltage | Power | Temperature | Data Trends | Utility Grade Metering

PHARMACEUTICAL

Problems

- Brown outs
- Dirty power
- Refrigeration disconnecting
- Time consuming to identify

Application Solutions

- Install circuit monitors
- Mount to side of main breaker
- EMX gateway to track historical data & trends

MANUFACTURING

Problems

- Motor failures
- Repairs after failure
- Unplanned downtime
- Reduced output

Application Solutions

- Install data monitoring devices
- Predefined upper and lower limits
- Alerts sent via email or text

INDUSTRIAL & COMMERCIAL BUILDINGS

Problems

- Climate controlled
- Utilize hardwired rooftop HVAC
- Limited visibility to energy demand and efficiencies

Application Solutions

- Install panel/circuit monitor at the branch circuit
- EMX software to plot data trends
- Alerts sent via email or text
- Preventative maintenance prior to increased energy payments

FREQUENTLY ASKED QUESTIONS

Q: Can other smart power cable configurations be added?

A: Yes, adding new configurations to the Smart Power Cable line can be done

Q: Can the environmental monitor be mounted inside of an electrical enclosure or panel?

A: The monitor cannot transmit data through metallic substrates, so if a metallic enclosure is being used, the monitor will have to mounted externally with the temperature probes fed into the enclosure.

Q: Can you provide a reference for gateway protocols?

- EMX gateway will communicate with our 3rd party's (Packet Power) software platform called EMX
- Modbus TCP/IP & SNMP are both generic protocols that can be utilized with most customer supplied front end systems.
- EtherNet/IP™ is the protocol that was developed to communicate with Rockwell's FactoryTalk platform.
- MTConnect® is the protocol that was developed for machine tool OEMs such as Mazak Corp.

INDUSTRY DOWNTIME

Data collection and analytics in today's markets are increasingly important to ensuring efficiency, uptime, and quality. For any industrial manufacturer or data center owner, the ability to predict costly downtime before it happens is critical to maintaining productivity.

INDUSTRY	HOURLY DOWNTIME COSTS	INDUSTRY	HOURLY DOWNTIME COSTS
Energy	$4,736,185	Consumer Products	$1,320,622
Telecommunications	$3,472,907	Chemicals	$1,183,440
Manufacturing	$2,707,158	Transportation	$1,123,747
Information Technology	$2,259,746	Utilities	$1,081,163
Insurance	$2,021,046	Healthcare	$1,069,028
Retail	$1,861,086	Metals/Natural Resources	$975,842
Pharmaceuticals	$1,819,030	Electronics	$802,348
Food/Beverage Processing	$1,351,671	Construction and Engineering	$654,834

Sources: IT Performance Engineering And Measurement Strategies: Quantifying Performance and Loss, Meta Group, Oct 2000; Fibre Channel Industry Association. Adjusted for inflation for 2022 dollars.

# INSIGHT™ DATA MONITORING (INDUSTRIAL)

System Capabilities

- Energy efficiency, failure prediction, temperature
- Cost allocation, downtime prevention
- Machine tool learning, safety and security
- Power usage trends, lighting efficiency
- Incoming vs branch vs point of use analysis

Applications

- Service mains, main distribution panels, transformers, subpanels
- Full panel monitoring, branch circuit monitoring, point of use equipment
- Point of use hardwired equipment (material handling, ie: conveyor belt)
- Environmental monitoring (ambient temperature, humidity, dew point, point of use: refrigeration, enclosures, factory etc.)

inSIGHT™ Solutions

- Panel Monitors
- Smart Power Cables
- Smart Pin and Sleeve
- Environmental Monitors

Legend:
- Panel Monitors (HBLPG or HBLBG)
- Smart Power Cables (HBLSG or HBLRG)
- Smart Pin & Sleeve Devices
- Environmental Monitor
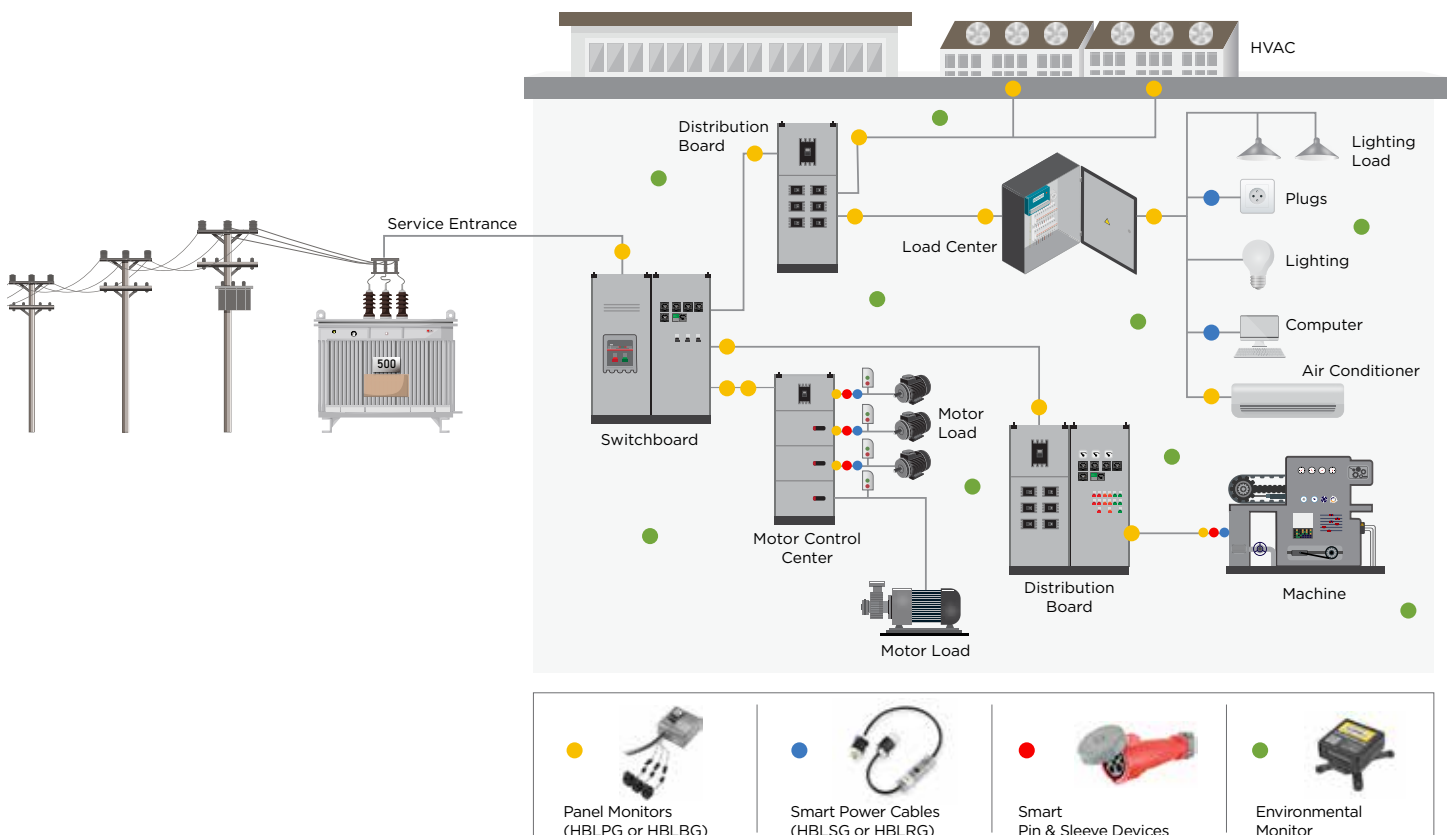
G.O.A.L.S.

General

Do you currently have the means to predict change in process or line down failures?

Do you have the capability of measuring and/or improving equipment efficiency and operational costs?

Are you utilizing your equipment to its full operational capabilities?

Obstacle

Could old or obsolete equipment be causing your productivity and quality issues?

Do you need to cut operating costs to stay competitive?

Are you able to quantify hourly downtime rates?

Do you want to extract more data from your equipment?

Achievement

inSIGHT provides real time data and insight into a facilities operations and energy usage.

Will help lower overall operation and energy costs and help prevent unanticipated downtime

Provides access to the data from anywhere at any time, provides alerts prior to equipment failure, and allows for quicker maintenance responses knowing who to contact.

Leverage

Once a failure occurs, does it ever cause additional damage to other equipment downstream.

If you could minimize the time it takes for maintenance, electricians, and contractors to repair would that help you run your business better.

Having analytics will lead to increased revenue buy improving reliability of your equipment.

Solution

If I told you, we could prevent unwanted and unplanned process failures. Would that be something of interest to you?

Cost savings resulted from operational energy efficiency and decreased downtime.

Easy system to set up, configure, and scale and can tie into existing management systems.
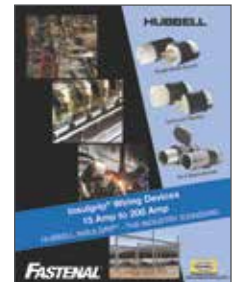
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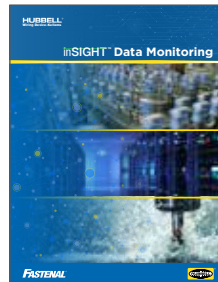
inSIGHT™ Data Monitoring
WLBIWS001FAS

Watertight Wiring Devices
WLBWT002FAS

Insulgrip® Wiring Devices
WLBL001FAS

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