

SIEMENS

Sm@rtGear® V7

Smarter power distribution.

Zero disruption.

Total visibility.

As industrial facilities push for greater uptime, safety and efficiency, electrical infrastructure is under increasing pressure. Many traditional power systems lack the visibility and intelligence needed to support modern operations.

Sm@rtGear® V7 brings real-time visibility, intelligent control, and predictive insights to power distribution, seamlessly integrating with UL1558 and UL891 equipment.



Safety first



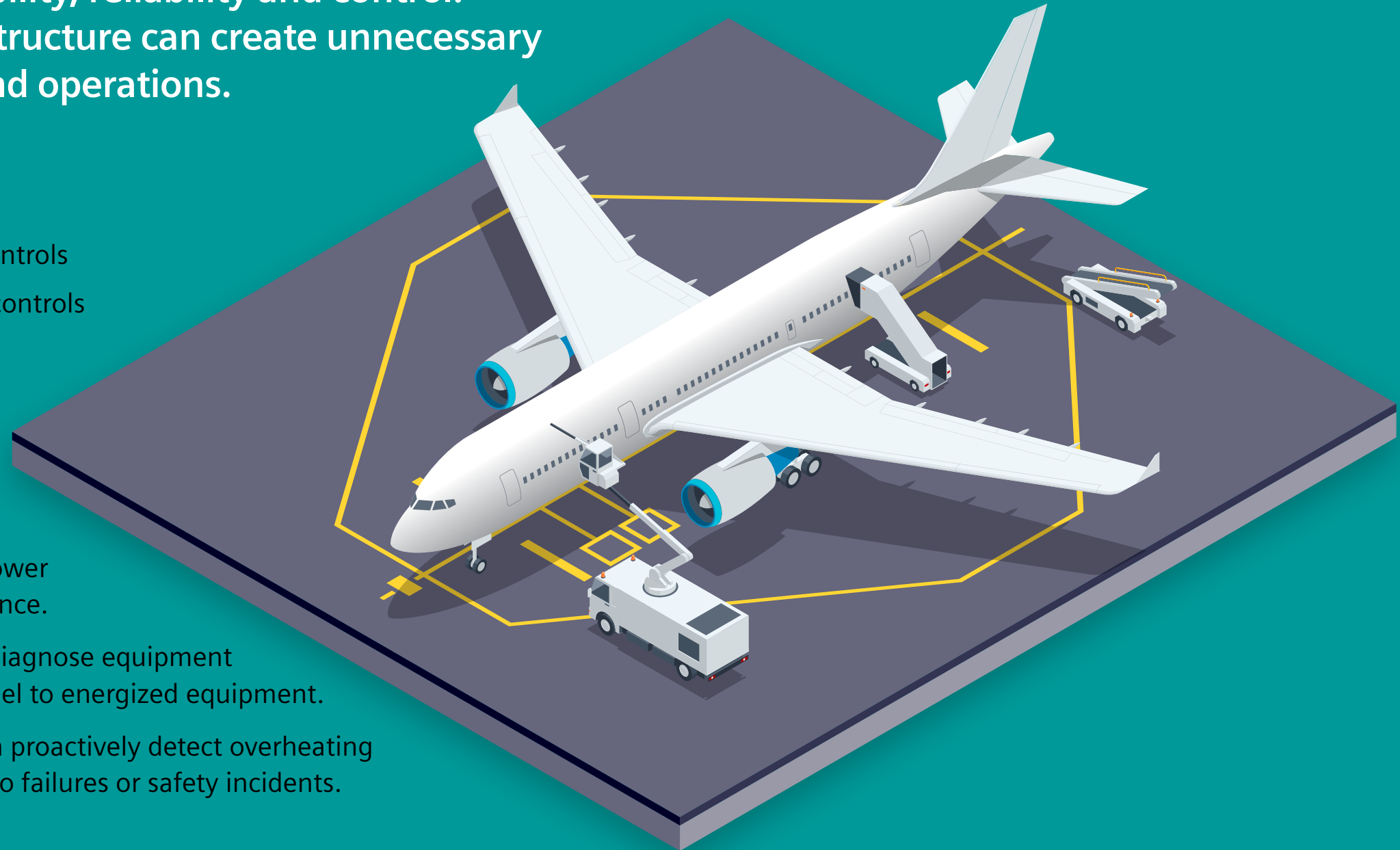
Safety starts with visibility, reliability and control.
Aging electrical infrastructure can create unnecessary risk for both people and operations.

Safer operations

- Energy efficient lighting and environmental controls
- Improvements to infrastructure, systems and controls
- Water conservation measures

Smarter systems

- Pratt & Whitney powers safer, more efficient manufacturing with Sm@rtGear's connected intelligence, real-time visibility and resilient power engineered to maximize uptime and performance.
- Industrial operators can remotely isolate and diagnose equipment issues without exposing maintenance personnel to energized equipment.
- Facilities with critical production processes can proactively detect overheating or environmental risks before they escalate into failures or safety incidents.



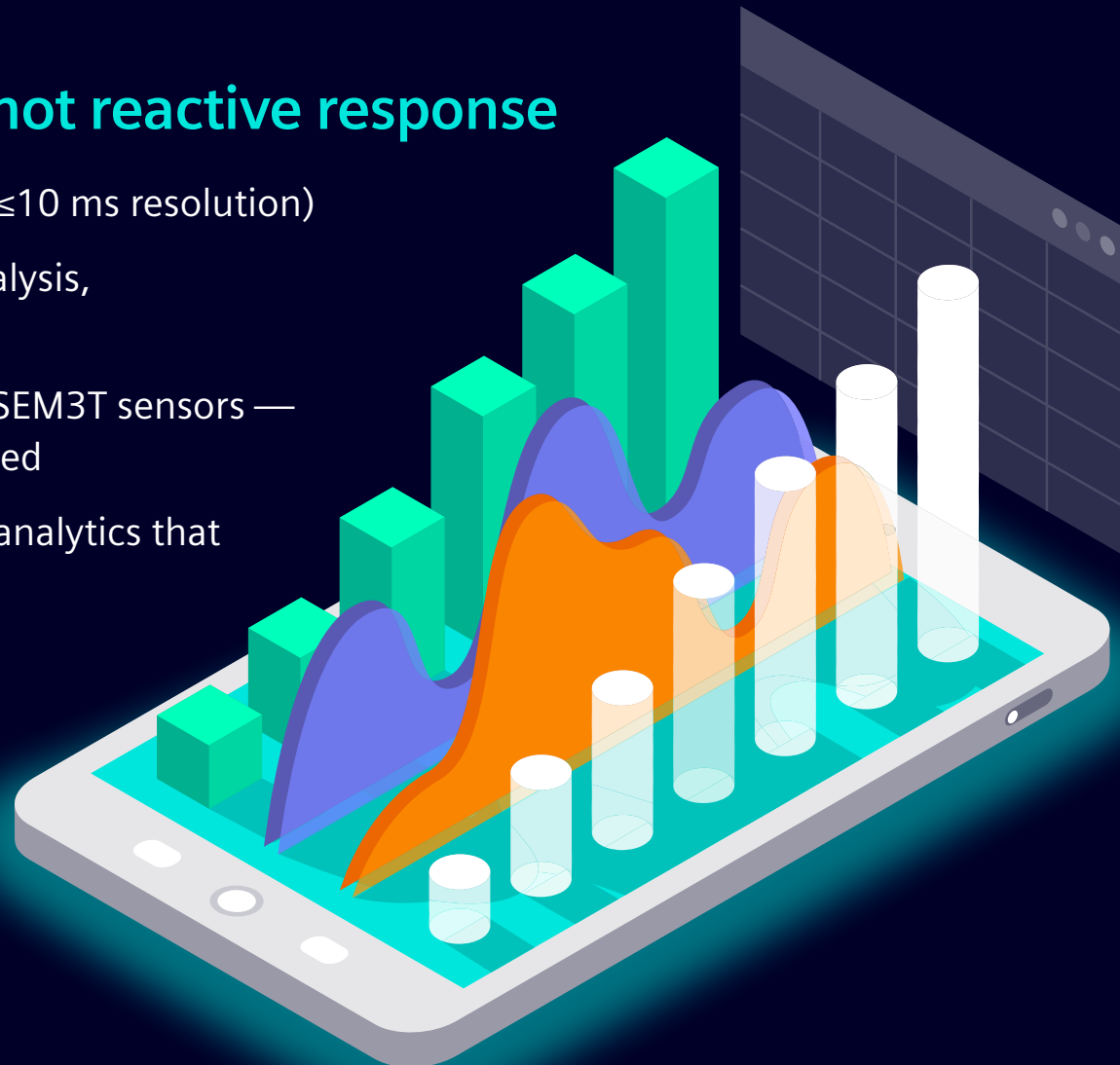
Operational efficiency



Industrial environments can't afford downtime, blind spots or delayed decisions. But many traditional systems still operate with disconnected data, limited visibility and reactive maintenance strategies. Intelligent power infrastructure helps facilities operate more proactively, efficiently, and predictably across critical operations.

Predictive insight, not reactive response

- Power quality monitoring (≤ 10 ms resolution)
- Harmonics, ITIC/CBEMA analysis, COMTRADE waveforms
- Thermal monitoring using SEM3T sensors — no infrared scanning required
- Predictive and prescriptive analytics that guide users to resolution



Solving critical pain points

High operational costs: Reduce expensive manual processes and unplanned downtime.

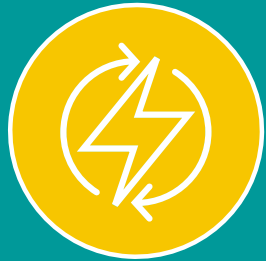
Lack of visibility: Gain clear, real-time understanding of the electrical system's health.

Compliance & safety risks: Ensure adherence to regulations and improve personnel safety.

Complex troubleshooting: Simplify identifying and resolving issues, reducing expert reliance.

Changing environments: Prepare for evolving demands and new technologies.

Power reliability



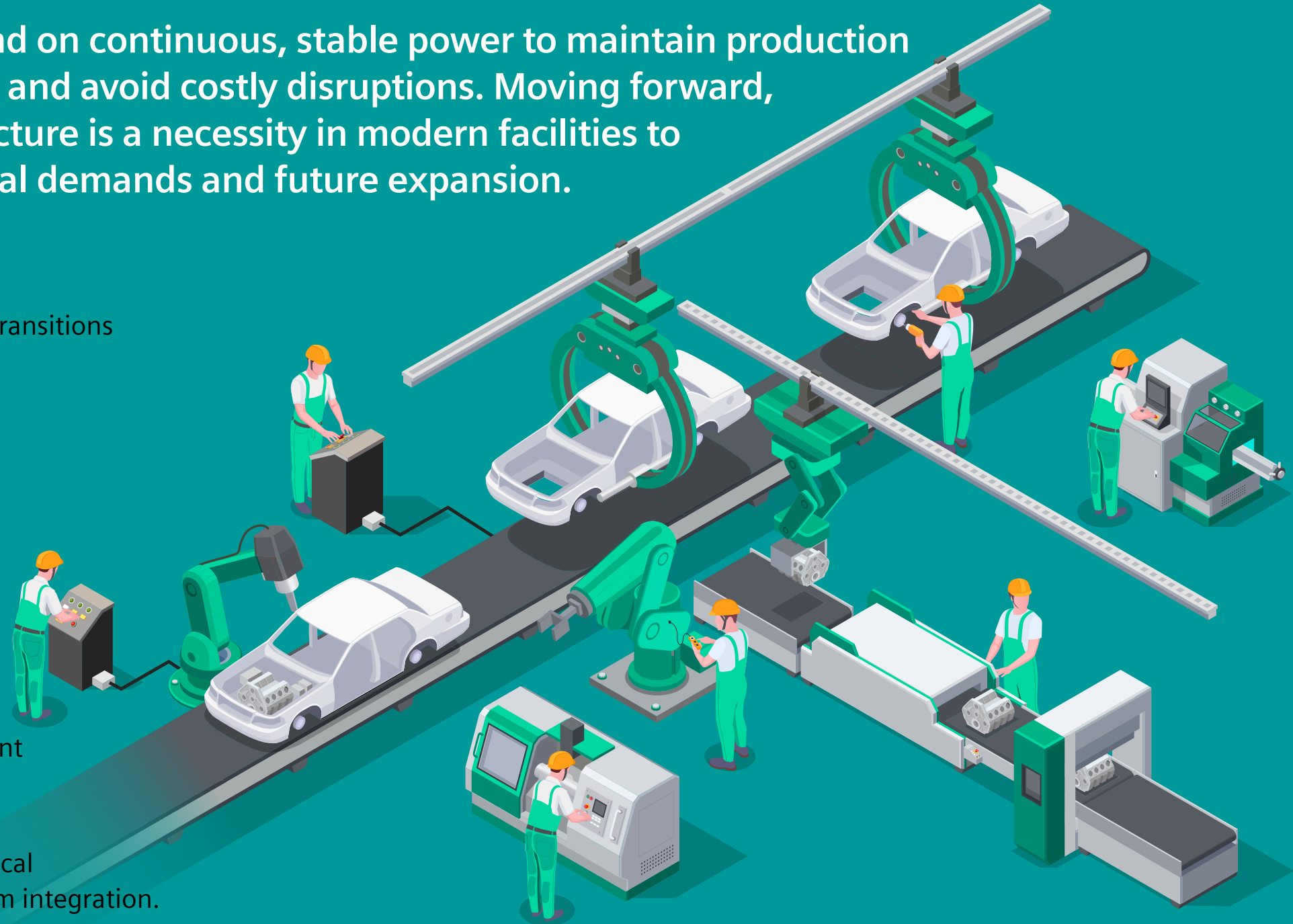
Industrial operations depend on continuous, stable power to maintain production quality, protect equipment, and avoid costly disruptions. Moving forward, resilient electrical infrastructure is a necessity in modern facilities to support evolving operational demands and future expansion.

Higher reliability & uptime

- Dynamic Automatic Transfer (ATO) with open/closed transitions
- Transfer speeds as fast as 50 ms
- Supports main-main, main-tie-main, generator, and custom schemes
- Load shedding and load restoration capable

Reliability in action

- Industrial plants with aging electrical infrastructure can modernize critical systems while maintaining operational continuity.
- Facilities requiring high uptime can leverage redundant processor architecture to improve resilience and reduce risks associated with power interruptions.
- Expanding manufacturing operations can scale electrical infrastructure more efficiently through modular system integration.



Secure connectivity



As industrial environments become increasingly digitalized, secure access to operational data is essential for visibility, coordination, and decision-making. Connected power infrastructure enables facilities to integrate systems, improve responsiveness, and support long-term digital transformation initiatives securely and efficiently.

Compliance made simple

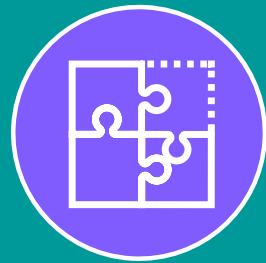
- Compliance Assist supports NFPA 70B (2023)
- Plan, schedule, and document electrical maintenance
- Stores inspection documents and form for up to 200 IoT and non-IoT devices
- Generates troubleshooting workflows for condition monitoring events and alarms



Connected and protected

- Multi-site manufacturers gain visibility into electrical infrastructure across facilities to improve operational decision-making.
- Industry 4.0 strategies to securely integrate power distribution data with plant management and automation systems.
- Industrial operations can use third-party systems through open architecture and standards-based connectivity.

Connectivity and security



The Sm@rtGear communication ecosystem provides secure MQTT messaging and complementary APIs for integrating with all Sm@rtGear Industrial Edge applications.

MQTT enables real-time data streaming, device communication, and seamless integration with existing industrial systems using modern cybersecurity processes and controls.

- Secure interoperability of upper-level systems and cloud applications using public APIs and MQTTS communication protocols
- Role-based user management
- SHA-256 password security
- AES 256 and TLS 1.2 (minimum) encryption
- ISO 27001 Industrial Edge Management
- ISO 27017 Siemens Xcelerator Cloud Management



Cloud services



Upper-level systems



Automation/power redundancy



IoT components and devices

Sm@rtGear brings you value...



Total estimated 5-year savings for an 18-breaker lineup:

\$18,000 Extend breaker maintenance from 3 to 5 years

\$18,000 Eliminate infrared scanning

\$30,000 Load studies are no longer needed

\$5,000 Move from time based maintenance to condition based maintenance

\$5,000 Improve power quality to protect sensitive equipment and assets

\$76,000^A Estimate does not include losses of productivity (Yields, labor, material, packaging, overhead recovery, or finished goods)

Sm@rtGear transforms your power distribution systems into a strategic asset.

- Optimize productivity
- Optimize maintenance
- Reduce infrared scanning
- Avoid load demand studies when expanding capacity
- Make data driven decisions
- Extend the equipment life-cycle
- Protect sensitive equipment
- Enhance the design build operate model

For more information visit our webpage.

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