WHITE
PAPER

LifeSafety Power®

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Six Striking Truths That Will Change Your Perception of Power

It's more than a piece of hardware. Expertly executed power solutions offer new areas of profitability for systems integrators and increased ROI with lower TCO for users.

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Introduction

Most people today aren't aware of the great strides being made in power solution innovation. That's because power has largely remained a specialty niche. But as smart systems and connected ecosystems have become ubiquitous, intelligent power systems have gained increasing importance and visibility.

In today's security environment, power has become a transformative part of an industry that's in transition to high-tech. Power systems now provide managed services and even network-based remote system control, management and monitoring — all further advancing the industry. In addition, the expertly engineered, agency-certified enclosures being designed today are helping solve many of the industry's problems, such as the current shortage of skilled tradesmen, and the need to consistently reduce labor costs.

What role does power play in your security or access control specification? When you know what power can provide in terms of return on investment (ROI) and lower total cost of ownership (TCO), you'll rethink how to approach power solutions in your next project. Modern power solutions, like managed power services, also offer the ability to generate new streams of recurring revenue for the systems integrator.

This white paper demonstrates six formative ways that solidify power's new position in the security market.

1. Power is Brand New

Well-designed power systems solve installation issues, reduce costs and make projects more efficient. Changes in overall makeup, configuration and wire management in prefabricated panel enclosure construction now offer seamless electrical and mechanical integration of power, locks and access panel hardware. Whereas past systems required three separate enclosures—one each for system power, lock power and access panels—customized power architecture enclosures combine all three into a single cabinet. Doesn't seem like a big deal? Well it is, and here's why:

- Time is money, especially when it comes to skilled technicians on the job. With loaded labor rates ranging anywhere from $40 to over $100 an hour, depending on the skills of the technician, certification and other factors (verified through an independent survey of systems integrators conducted by LifeSafety Power in 2017), being able to wire all components and devices in the field quickly is critical to profitability; and there's no prewiring required in the shop either.

- A standardized, prewired installation platform eliminates hours of panel wiring, lock control and communication wiring; in fact, a 40-percent installation savings and 60-percent wall space savings can be achieved. When a technician can finish the job sooner and move onto the next project, there's additional efficiency and profitability achieved.

- Also, according to the LifeSafety Power survey, it takes a technician about 7 hours on average to wire a 16-door access control system. At a $70-per-hour loaded rate (on average, also per the survey) that's $490 to wire the system in labor costs alone. The material costs such as the wire and Panduit conduit add even more.

- Preconfigured wiring with a standard design in a single enclosure greatly simplifies maintenance, which is a huge cost center for installing companies and their customers. Preconfigured enclosures also streamline troubleshooting (less labor in the field), as wiring is easy to reach, service and manage.

- And the same LifeSafety Power survey found that a neat and clean appearance for an installation's wire management is ranked at the top of the importance scale (#5) by integrator respondents.

2. Solutions Address Industry Issues

As hardware margins for installations continue to decline, systems integrators need to develop every way possible to become more efficient and profitable. Additionally, an industry-wide shortage of skilled security technicians is adding to the equation, so installation simplification is key.

How long does it take to wire a traditional access system? According to survey respondents, that time can vary dramatically—up to eight hours or more for 16-door access control systems. A standardized power system yields professional results for integrators and their customers. Other benefits include:

- Applying standardized products, like integrated access enclosures, delivers consistency across any project, campus or enterprise—requiring less training and retraining by workers.

- Precision factory prewiring eliminates field wiring guesswork, so integrators and end users can establish equipment installation standards for uniform operation, maintenance and servicing of the physical security system.

- Prewiring eliminates installation variability and guesswork and promotes system uniformity for consistent, repeatable results.

- All of these factors cut labor costs and increase system uptime so integrators can move on to new jobs quickly and end-users are assured integrity with a best-in-class implementation.

3. Flexibility in Specification Comes Easy

Installing companies also need to have the flexibility to add devices, accessories and connectivity as they transition to a managed services business. Pre-fabricated enclosures are constructed to fit different control boards, power and other circuitry. Enclosures allow for a variety of accessory options and access plates to work in partnership with leading manufacturers including AMAG Technology, Brivo, Honeywell Security, Mercury Security, Paxton Access, Software House by Tyco, HID VertX and others. More ways in which pre-fabricated power enclosures assist the specification include:

- Scheduling for jobs becomes less complex, as the time for installation in the field is predictable. Leveraging a Just-in-Time (JIT) inventory strategy allows companies to increase efficiency and decrease waste by receiving goods only as they are needed in the production process, thereby reducing inventory costs.

- Modular and flexible designs allow for many system configurations: single, dual or multi-voltage outputs and power distribution, control, or signaling; fire alarm interface with failsafe or fail secure lock control; and network communication, all of which can come in one advanced, multi-agency listed system platform.

- Direct-drop shipments bring prewired panels to the job site at the time of installation, saving integrators and end-users the time and expense of ordering, expediting and coordinating the necessary components inherent with field-wired installations.

- Spare parts procurement and management is easier in a standardized installation, and logistics become less complex, with only a single part number to source instead of a set of individual components.

4. Uniform Installations are a Win-Win

How much value would you place on a standardized, consistent end product? Respondents to the LifeSafety Power survey ranked this feature high, with the majority responding that it's among their top-5 requirements in terms of value. Uniform installations provide many other advantages all around:

- Pre-fabricated enclosures also meet the latest needs of data centers and small-footprint IT closets, making it applicable for more jobs, areas and vertical markets. Streamlined rack-configurations provide both operating power and a mechanical housing for access control components.

- Consistency brings quicker installations with more professional results, requires less retraining, and provides a high-level of value-add in the eyes of the end-user customer.

- Standardized installation and wiring documentation can be created for all systems—providing efficiency in service, maintenance and follow up work.

- Standard troubleshooting techniques and processes can be developed and deployed across an enterprise, making it easier for technicians, especially apprentices or newcomers, to maintain optimal system functionality.

5. Managed Power Services Mean New Streams of RMR

Power has become a transformative part of the industry's move toward providing managed services, including remote systems management and monitoring—driving real-time data to end-user customers for proactive evaluation and resolution of potential challenges with connected products.

Visibility and control through managed services
Power solutions have evolved to become intelligent networking devices that can predict battery health and pre-empt possible downtime with real-time analytics on the status of devices. The new value-add of power also boasts the following:

- The possibilities to perform managed power services can encompass a number of physical elements: the main power supply, power system outputs, supervised inputs, and standby batteries. Managed monitoring can include: event reports, AC loss notification, service due reminders, overcurrent alert, low-battery warning, and insufficient battery standby. Remote servicing capabilities of power solutions can include: output supervision, battery load testing, remote power cycling, and system health logs/trouble alerts.

- With power monitoring also comes the opportunity to create real-time action alerts and reports. Alert formats may include email, XML, web-browser notification or Simple Network Management Protocol (SNMP). For example, a short circuit or integrated lock that is drawing more or less power than it should, is an indication that it's beginning to fail. In this condition, an email alert or SNMP trap (notification) can be automatically sent to the integration company or end user, alerting of a potential problem.

- With proactive power management systems and predictive analytics data from networked components, an end user can be informed, ahead of time, of impending lock failure or battery fatigue, offering the ability to replace components in a timely manner. With continuous power system monitoring comes the opportunity to create specific action alerts and reports for comprehensive system maintenance and management.

- The enhanced monitoring proposition of managed power sends immediate notification of current or impending problems. Once notified, the monitored parameters allow basic troubleshooting remotely without sending a technician to the site.
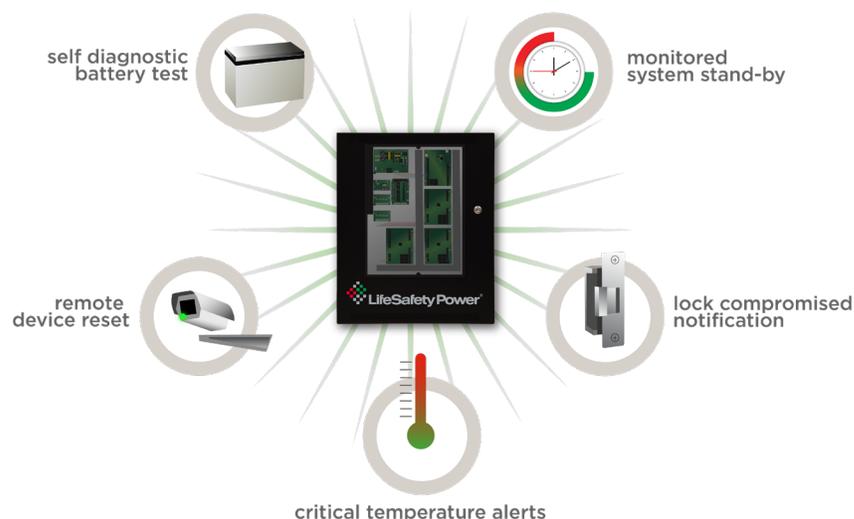
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6. Focus on ROI, TCO

All products from LifeSafety Power are designed in line with an industry that is experiencing a dramatic shift from analog systems to everything being IP network based. LifeSafety Power has led the way with their power products, which provide precision data and history to customers—proactive intelligence they can use for predictive management of access control systems and devices.

With the new standard of power performance created by LifeSafety Power solutions, security integrators can achieve a 77-percent increase in installation and troubleshooting efficiency—while the end user customer realizes a lower total cost of ownership and stronger return on investment with an active, IP-managed system. Other benefits:

- Smart power systems can gather specific information to predict and forecast component failure, like a lock or battery failure—a significant value-add for the end-user customer.

- The enhanced monitoring provided by managed power allows immediate notification of current or impending problems.

- Typically, the payback period for a managed power system investment is recouped in short order from increased operational efficiencies for the integrator and the end user. See the LifeSafety Power white paper: The Compelling ROI of Managed Power Solutions, for specific calculations and explanations of ROI.

- Users gain access to historical data and system operational trends, helping them leverage their entire connected landscape more efficiently.

Proactive Power Management

self diagnostic battery test

monitored system stand-by

remote device reset

lock compromised notification

critical temperature alerts

Conclusion

There have been significant changes in the way prefabricated panel enclosures are constructed—now offering seamless electrical and mechanical integration of power, locks and access panel hardware. Prewired and ready to install, quick-connect terminal strips can incorporate the latest access control hardware. Modular and flexible designs allow for many system configurations for every market and customer, all of which come in one advanced, multi-agency (UL, cUL, CE, FCC) listed system platform.

All these innovations are part of the evolution of power—from static device to intelligent networking hardware that's an indispensable part of the connected security and access control solution today.

For more information on LifeSafety Power products or assistance with your next project, please contact us at https://www.lifesafetypower.com/ or (888) 577-2898.

About LifeSafety Power — Power is Knowledge™

LifeSafety Power is the leader in Smart Power Solutions and patented remote monitoring capabilities, providing modular AC, DC, and PoE power systems that meet the growing needs of the life safety and security industries. Realizing that network technology presents new opportunities for active monitoring and management of power supplies connected to access control systems, fire systems, video surveillance and more, the company has built its products from day one with intelligence and functionality in mind. LifeSafety Power's current product offering and planned future innovations in battery test, display and diagnostics represent an important step in providing overall system reliability and uptime.

All of the product features discussed in this white paper are available within LifeSafety Power's product line.

Visit www.lifesafetypower.com for more information.

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