The energy to heal

Energy management solutions for healthcare facilities
Medical centers are under intense pressure to deliver higher standards of care to more people at a lower cost than ever before—and this requires a safe, absolutely reliable, and efficient supply of electric power. Virtually every piece of equipment in today’s hospital, from the bed in the patient’s room to the MRI in the radiology department, is powered by electricity.

As a result, your ability to provide the best possible care to your patients, protect your investment in technology, and avoid costly and potentially disastrous disruptions of service means that your electrical system must be robust, redundant, and smart enough to ensure the steady flow of electric power.

To meet this challenge, you must:

• Maximize the reliability and efficiency of your system, so that it delivers high-quality normal and emergency power at the lowest possible cost.

• Install devices that raise the level of safety and, in particular, protect your employees and equipment from the explosive energy of an arc flash.

• Find a partner with the depth of expertise, the resources, and the commitment to support you through the entire system lifecycle, including maintenance and troubleshooting as well as design and commissioning.

GE stands ready in all three areas.
A name you can trust

For more than 100 years, hospitals have turned to GE to provide the electrical infrastructure that powers their facilities. The reason today is the same as it was a century ago: the breadth of our offerings and our employee expertise. GE’s energy management solutions span everything from emergency back-up power systems to power monitoring to high-efficiency motors and control. Because our solutions are designed to work together, integrated GE systems give hospitals an advantage when it comes to improving power quality and lowering operating costs.

Our long-term commitment to the health care industry also gives us the ability to look to the future. We use the knowledge and relationships developed over decades of working closely with hospitals to produce a steady stream of innovations that make their electrical systems even more safe and reliable.

When you work with GE, you have a partner you can trust. Our experienced project management teams ensure that you have the commercial and technical support you need throughout the project lifecycle, while our field personnel can provide start-up, commissioning, maintenance, and 24x7 emergency services.
The ultimate mission
critical system

If there is one system that is crucial to the operation of your medical center, it is your electric infrastructure. And the demands on this infrastructure are increasing all the time. Safety standards are becoming more stringent and technology ever more power hungry. This means that hospitals must continually upgrade and modernize elements of their systems while maintaining the rest at peak functionality.
Safety and protection

Arc flashes are rare but extremely destructive events that can seriously injure employees and take your electrical system down for days. No hospital can afford to experience one.

GE offers an integrated strategy that sharply reduces the possibility of their occurrence, contain their explosive energy if they do occur, and protect your personnel and your electrical system.

**Entellisys™ LV switchgear allows operators to stay out of the arc flash zone and lowers the incident energy of an arc flash.**

- The Near-Gear Human Machine Interface (HMI) moves control, monitoring, and diagnostics away from the line-up.
- In Reduced Energy Let-Thru (RELT) mode, operators can specify minimum pick-up and maximum speed settings before working near equipment.
- Entellisys detects lower level arcing faults and clears them quickly, minimizing arc flash energy while maintaining selectivity.

**With EntelliGuard® TU, GE’s state-of-the-art trip unit, you never have to sacrifice selectivity for flash protection.** EntelliGuard TU gives you the flexibility to fine-tune your flash mitigation strategy to the requirements of your system. You can choose a host of parameters to achieve the optimum mix of system safety and reliability.

**Arc Vault™ Protection System** takes a new approach to arc flash containment. Rather than exhausting the arc flash, it extinguishes the arcing fault in less than eight milliseconds, reducing the destructive energy released by the flash by more than half.

**The first line of defense for your employees against an electrical arc is knowledge.** That's why GE's comprehensive arc-flash hazard study is so important. It helps medical centers address the recommendations of the National Fire Protection Association’s (NFPA) Standard 70E.
Entellisys LV switchgear provides the redundancy, monitoring, and alarms that enable you to address issues before they become a crisis:

- Entellisys generates the information you need to keep your system running smoothly. It produces predictive maintenance data, tracks 600 kinds of events, and offers real-time remote monitoring and access to such diagnostic tools as alarms, event logs, and waveform capture.

- Redundancy is integral to the Entellisys design, from its parallel architecture that dramatically increases system reliability to the multiple hardware control of each circuit breaker.

Full system reliability and efficiency

There is no convenient time for a hospital to lose power. Ensuring your energy infrastructure delivers the power you need 24x7 requires the kind of tightly integrated normal and emergency systems that GE solutions provide.

GE emergency backup power systems like the Energy Commander™ paralleling switchgear and the ZTE Series automatic transfer switches ensure that you deliver power when your utility goes offline. Transfer switches also offer integrated Joint Commission (JCAHO) reporting.

PMCS Modular Systems include modules for monitoring, power quality, cost allocation, and control and automation. They give you the ability to fine-tune your system for utmost productivity.

GE Arc Vault Protection System is highly effective at protecting your equipment whether the switchgear doors are open or closed. You’ll be able to restore your system to operation much faster than with traditional arc flash containment systems.
Project execution and support

GE’s century of service to healthcare providers has given us a deep appreciation of how important flawless power system operation is to hospitals and medical centers. This appreciation is apparent in the design of our electrical system components, and our approach to project execution and lifecycle support:

**Design and installation support** includes a single point of contact for project management, on-time drawings and shipments, complete documentation, and witness tests in our factory.

**Power delivery service and support** covers expert training on new equipment as well as start-up and commissioning services.

With over 500 field engineers and technicians operating out of 80 offices in North America, we can provide 24x7x365 emergency services and parts support.

Ensure that your facility has the energy it needs

www.geindustrial.com/healthcare
Look to GE to help manage your energy—now and in the future.

**ecomagination** is GE's commitment to imagine and build innovative solutions to today's environmental challenges while driving economic growth. Taken together, solutions like fleet electrification, submetering, high-efficiency motors, lighting control, and HVAC upgrades create exciting new opportunities for you to significantly improve energy management at your medical center and reduce energy consumption.

Prepare for conversion of your gas powered fleet to electric vehicles by installing GE WattStation™ EV chargers.

GE sub-metering panels provide essential energy usage information, enabling facility managers to make more informed decisions.

GE Lighting Controls Panels can switch off lighting automatically in areas of a facility that are not in use, reducing energy costs.

High Efficiency Motors like GE's NEMA Premium X$D Ultra® help facilities lower operating expenses, while meeting EISA environmental compliance requirements.

GE drives can provide better control of your HVAC systems to reduce your energy costs.

An energy audit conducted by our team of efficiency experts can help identify inefficiencies in your facility's energy use, and provide recommendations on ways to save money and reduce your carbon footprint.