# Healthcare Secure Power Solutions

With patient care on the line, there's no room for downtime. Schneider Electric enables the technologies that ensure availability 24 hours a day, 365 days a year.

Schneider Electric

# Care New England

**InfraStruxure Solution Enables Higher Availability, Better Care**

"Care New England Health System (CNE) is composed of an association of five leading healthcare providers, each of which has established a reputation as a leader in the domains of community health, research, and education.

"Three years ago, we embarked on a strategic business plan to enhance the quality of care, while streamlining processes and cutting costs. On the information technology side, we made the decision to digitize as many critical processes as possible.

"In our assessment of available power, cooling, and rack enclosure technologies, we determined that many of the physical infrastructure solutions existing in the marketplace today possessed single points of failure, did not employ N+1, fault-tolerant components, and could not sufficiently detect and communicate faults at the system and component level over the network.

"Rather than buy one oversized 200kW UPS, we purchased an InfraStruxure solution consisting of four 40kW, N+1 systems with 50 enclosures, air distribution, cable management, environmental monitoring, and metered PDUs. The design of the InfraStruxure gives us the flexibility to scale by simply adding additional racks, batteries, and power modules.

"Due to the rapid pace of healthcare IT implementation, we needed to be able to deploy systems into the data center more rapidly. The ability of APC to quickly deliver power when and where we need it is unparalleled in the industry."

*—Howard Rubin, director, IS technical services (right)*
*Henry Mota, network analyst (left)*
*Care New England*

# Protecting Patients, Supporting the Critical Path for Safety and Traceability

For the healthcare industry, ensuring a quality environment of patient care is paramount. New technologies—from digital imaging to security-enhancing baby finders—are helping to reduce errors, improve care, and decrease costs simultaneously.

But to enable these technologies, healthcare facilities need a rock-solid physical infrastructure to back up their assets. The challenge, then, is to find a scalable, modular solution with the lowest total cost of ownership over time.

With energy costs soaring, the system has to be efficient. Availability has to be constant, from patient check-in to checkout. And, at the end of the day, the solution has to comply with increasingly strict standards and legislation.

Schneider Electric has just what the doctor ordered. The easily installed InfraStruxure solution enables the benefits of a high-density environment at a lower relative cost than other solutions, and will offer you greater operational and energy efficiency:
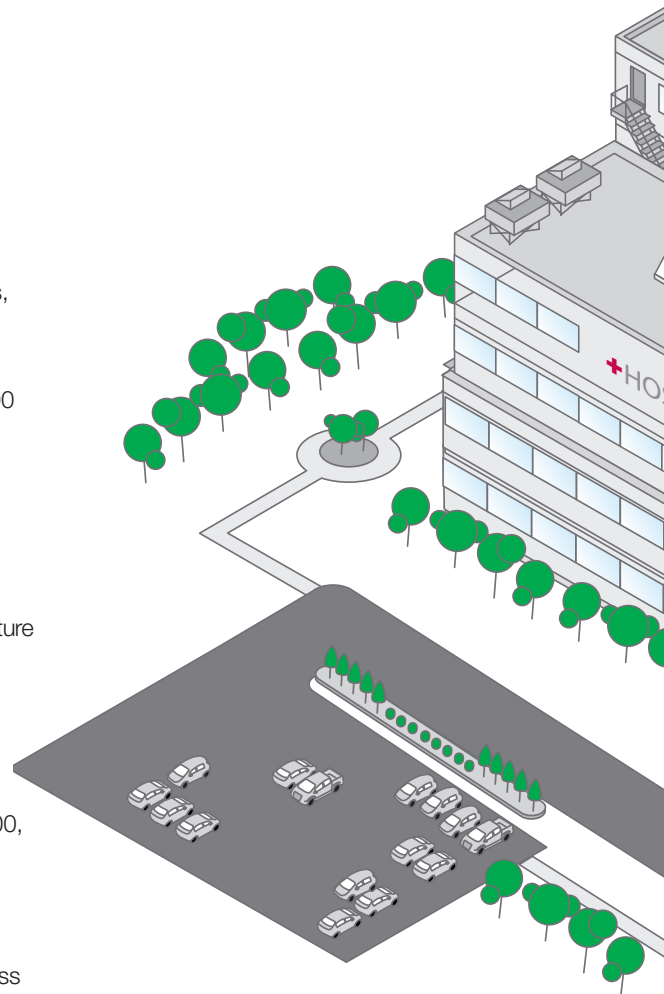
> An ideal solution for a wide range of environments, from wiring closets to data centers and modalities throughout a hospital.

> Immediately eliminates hot spots by putting all the high density in one place.

> Enhanced overall efficiency, reduced power consumption, and optimal availability.

> The best level of building operation traceability possible.

# Schneider Electric Healthcare Secure Power Solutions

## The Scalable Approach to High Availability

**1** Operating Room*
> Houses sensitive electronic equipment, mobile modalities, and temperature control.

> *APC Solution:* Smart-UPS™ RT, Symmetra™ LX

**2** Critical Care Room*
> Medical panels, mobile modalities, and sensitive electronic equipment.

> *APC Solution:* Smart-UPS RT, Symmetra LX

**3** Switch Room/Telecom Closets
> Electric panels and rack-based IT equipment.

> *APC Solution:* Back-UPS™, Smart-UPS

**4** Nursing Station
> Reception area, including computers, phones, and misc. electronic equipment.

> *APC Solution:* Back-UPS

**5** CCTV (Closed-Circuit TV)
> *APC Solution:* MGE™ Galaxy 3500

**6** Radiology/Imaging Room*
> Supports RIS, PACS, modalities, and other electronic equipment.

> *APC Solution:* Smart-UPS RT, Symmetra LX, MGE Galaxy 5000

**7** Data Center
> The IT hub of the hospital; supporting the Hospital Information System (HIS)

> *APC Solution:* Symmetra PX, InfraStruxure HD-Ready Architecture

**8** Utilities Room
> Includes the building's electrical distribution, generator, and backup power.

> *APC Solution:* MGE Galaxy 5000, MGE EPS 7000 & 8000, MGE Upsilon STS, MGE PMM

**9** Building Management System
> Computers, fire detection, access control, and general building supervision.

> *APC Solution:* MGE Galaxy 5000, MGE Galaxy 3500

*Supplies high availability and quality of power to equipment separately located in patient vicinity.

## Single-Phase UPS

1–16 kVA, APC Smart-UPS, Smart-UPS RT, Back-UPS, Symmetra LX

- Performance power protection with scalable runtime for space-constrained server rooms, voice and data networks
- Rack/tower convertible and optimized form factor for easy integration
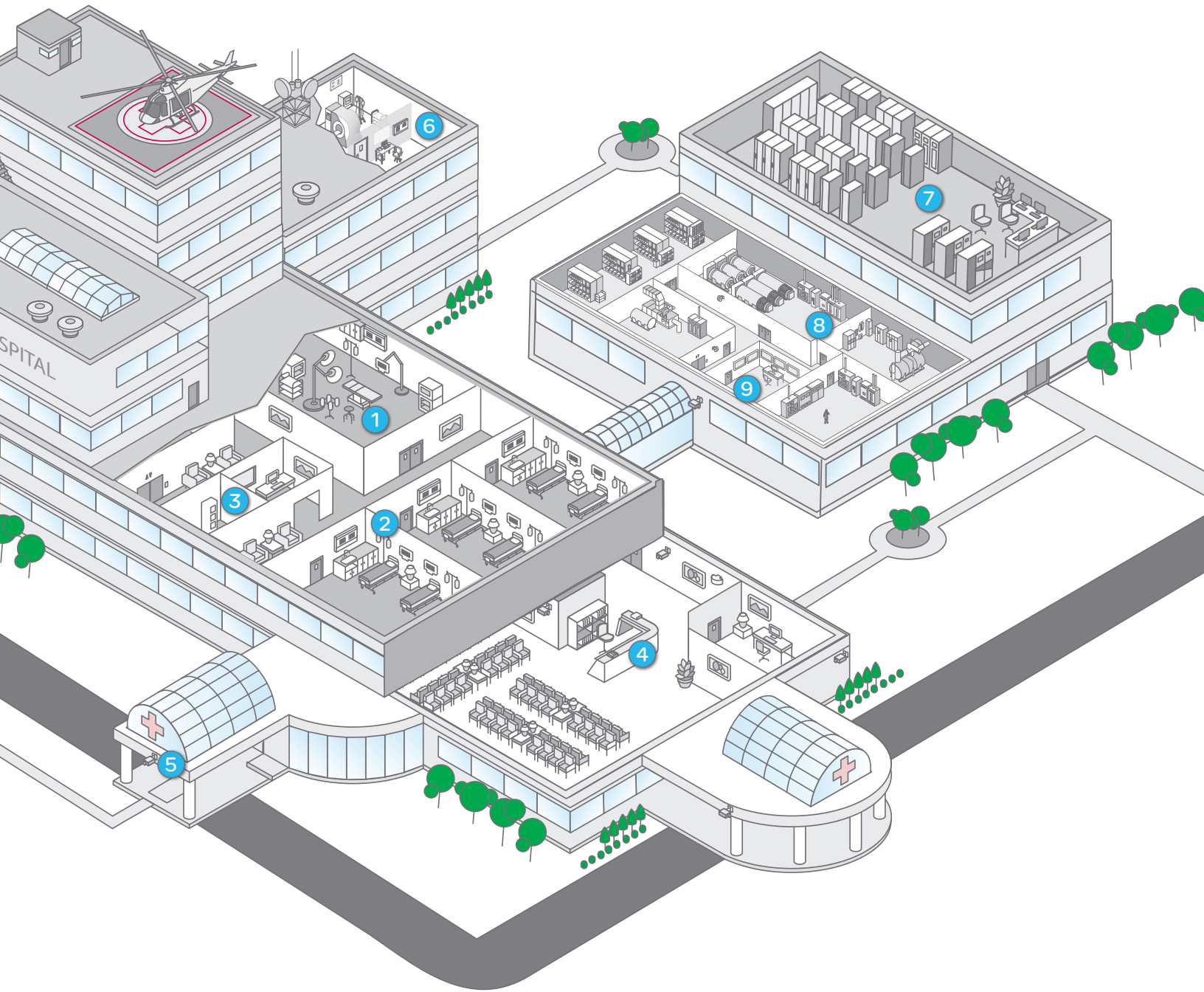
## Three-Phase UPS

10 – 4800 kVA, MGE Galaxy 5000, 7000, 9000, MGE EPS 7000 and 8000, Symmetra MW, Symmetra PX, MGE Galaxy 3500

- Right-sized three-phase power protection for any size high-density power zone or data center
- High power quality to ensure optimum operation of applications
- Reduced footprint for easy installation in reduced space

## Three-Phase Static Transfer Switch

30–2000 A, MGE Upsilon STS

- Supplies power to a range of equipment from two independent and redundant sources

- Automatically transfers power to a stable alternate source in less than 4 ms

- Detection and transfer times up to ten times faster than many other switches

## InfraStruxure HD-Ready Architecture

10 – 500 kVA

- Integrated power, cooling, and electrical distribution

- Built-in N+1 redundancy for higher availability

- Standardized parts make for quick, easy installation and streamlined maintenance

# InfraStruxure Architecture:
## The Right Prescription for Every Environment

Implementing a right-sized IT solution for your healthcare facility has never been simpler.

InfraStruxure HD-Ready Architecture puts your hospital on the fast track to optimal efficiency, making the best use of your available space and still allowing for future growth.

Making the change from paper to digital records? Not a problem—InfraStruxure architecture supports and strengthens the critical path elements of electronic medical records (EMR), every step of the way. Additionally, the APC high-availability solution will enable every healthcare facility to:

> Make EMR data readily available whenever required by healthcare professionals

> Drive up the efficiency and service levels across the system through consolidation and standardization

> Deploy prescription order entry and wireless technology for physicians and nurses

> Ensure the "back end"—i.e., the physical infrastructure—is ready to handle the heavy IT load

# Secure Power systems:
## Ensuring Uptime for Every Modality

Not all of a hospital's power protection needs will be based in the data center.

To enhance the availability of utility power to the non-IT aspects of the hospital, Schneider Electric offers a full line of power protection solutions from APC. These single- and three-phase UPSs are ideal for ensuring that only high-quality power reaches the various types of modalities, strengthening your overall availability.

> Small footprints and high reliability make APC UPSs the perfect choice to protect against power disturbances

> Battery backup systems prevent power outages from causing loss of patient data and contribute to safe, reliable radiology examinations

> APC UPSs meet—and often exceed—such stringent standards as UL1778, FCC Part 15 Class A, ANSI C62.41, and IEC 62040

> Ideal for large floor-mounted modalities, with enough power protection to back up the entire room

# Schneider Electric
# Critical Power and Cooling Services:
## Dedicated Teams with Experience You Can Trust

The dedicated service team at Schneider Electric enables your healthcare solution to hit the ground running, ensuring an optimized facility plan, streamlined project management, and safe, speedy deployment of your solution.

Need help making the transition to a high-density hospital? Our service engineers handle that too - from installation management to server migration, cable management, and software integration. A dedicated project manager can guide you through the project, ensuring completion on schedule and within budget. With the move to high density, energy management also becomes a top concern. Schneider Electric offers a number of assessment services aimed at improving energy efficiency while enhancing reliability in your data center.

With Schneider Electric Critical Power & Cooling Services, you can concentrate on patient care while we take care of the details on the back end. Your solution can be safely and efficiently implemented with installation and startup performed by one of our certified field service engineers. Our trusted Remote Monitoring Service acts as a second set of eyes, with secure 24-hour monitoring to detect and resolve problems before they become critical. Select one of our Advantage Plan comprehensive service packages for hassle-free maintenance that minimizes downtime and protects your investment. Advantage Plans include technical support, preventive maintenance, quick on-site response, and remote monitoring – providing you with peace of mind in knowing your solution is receiving the care it needs for optimal performance.

Choosing the right products from Schneider Electric is only the start. Your sales representative can provide you with the convenience of a total solution – systems, software, and services from a single source. Ask your rep to suggest a service plan that fits your unique needs.

# Schneider Electric:
## A Total Healthcare Solution

Scalability, experience, reliability—there are a dozen reasons for any business to choose Schneider Electric for an innovative, integrated solution.

But for those in the healthcare profession, Schneider Electric offers a more complete solution than any other industry player. More than 100,000 employees in more than 130 countries are on staff to make sure you have the help you need, when you need it. And since almost 5% of its turnover is reinvested in R&D, you can rest assured you're getting an efficient and innovative product.

**So, what can Schneider Electric do for your hospital?**

> A complete electrical distribution architecture that will maximize uptime.

> Energy efficiency and maintenance optimization to save up to 30% on operating costs.

> Service teams to help improve the performance of the hospital throughout its complete life cycle.

> Integrated security to ensure peace of mind.

> Optimized and personalized room control to enhance patient's experience.

> More than 2,000 references in the hospital industry.

With the combined expertise of APC, Square D™, TAC™, and Pelco™, a hospital can now outfit its entire infrastructure with the best in building automation and energy management—all from the world leader in electrical distribution, power, and control: Schneider Electric.

Get more information on Schneider Electric solutions at *www.schneider-electric.com*

To learn more about Schneider Electric healthcare solutions, visit *www.schneider-electric.com* and click on Solutions > Buildings > Hospitals

Try our FREE, Web-based applications to experiment with virtualization, efficiency, and more at *tools.apc.com*

## Make the most of your energy ℠

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