

# DIGITAL

华山医院北院

## Healthcare goes high tech.

Huashan Hospital North at Fudan University  
— Shanghai, China

How Huashan Hospital North's digital transformation  
increases reliability with connected EcoStruxure™ solutions

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EcoStruxure Building and EcoStruxure Power offer Connected Products, Edge Control, and Apps, Analytics, and Services within our IoT-enabled architecture. EcoStruxure makes hospitals more connected, reliable, and efficient worldwide.

### Advancing the patient experience

Being a healthcare industry leader means finding better ways to protect lives every day. Huashan Hospital North at Fudan University has the distinction of being a “Grade 3, Class A” facility in China. Establishing itself as a cutting-edge teaching hospital means putting digitization to work to ensure safer, more reliable care and a more comfortable experience for its patients. And the benefits don’t stop there: Digitization has improved Huashan Hospital North’s management efficiency by 20 percent while reducing energy consumption by 18 percent — a major feat for a hospital that has ...

- 950,000 outpatients in 2018
- 25,000 inpatients
- 400 professional specialists
- An international education and research center
- American CAP-accredited laboratories

Hospital staff did their best working in a facility constructed under technological and budget constraints in 2012, but wanted to operate more sustainably and reduce energy consumption. In fact, other local hospitals had better power visibility and significantly lower energy consumption in relation to the number of beds.

Further, very few of the hospital’s systems were integrated, meaning they lacked a unified interface for ease of management. Lastly, there was no way of detecting potential problems in the power system or identifying hidden dangers in electrical safety that could cause downtime in operations.

Motivated and unwilling to fall behind, the logistics staff sought out the ideal connected technology to create a smart logistics nerve center, better manage their systems, and provide eco-friendly outcomes.

## Goal

Undergo digital transformation to create a logistics nerve center, improving operational management at Huashan Hospital North.

## Story

Partnering with Schneider Electric, the facility implemented innovative digital solutions to improve power reliability as well as operational and energy efficiency.

## Solution

Schneider Electric integrated EcoStruxure Power Advisor, Power Monitoring Expert, and EcoStruxure Building Operation — forming a complete digital solution, customized to the hospital’s needs.

## Results

Huashan Hospital North saw a dip in energy consumption and gains in operational efficiency. They enjoy greater visibility and reliability with EcoStruxure, all the while enhancing the patient experience.

“I needed a solution to improve the efficiency of equipment and services staff, and to optimize power safety,” said Dong An, director of the Logistics Management Office. “We considered several factors, including digital tools to monitor energy-consuming equipment, and compared other companies ... Schneider Electric’s proposal was just the right fit for our hospital. I would say it is tailor-made.”

### Improving safety and savings

Upon partnering with Schneider, Huashan Hospital North made their digital transformation happen with the help of custom EcoStruxure Building and EcoStruxure Power solutions.

“Schneider customized an integrated solution for our hospital, including EcoStruxure Power Advisor, Power Monitoring Expert, and EcoStruxure Building Operation,” An said.

In the fast-paced, critical facility setting there is no time for setbacks. Digitization allows the Huashan Hospital North staff to take a proactive approach to patient and staff safety, identifying issues before they arise, and providing a more seamless experience from check-in to discharge.

“Relying on digital professional services, we’re able to discover hidden potential dangers in a timely manner and carry out proactive defense to ensure power safety,” An said. “Every system can be automatically controlled. Troubleshooting and issue resolution time has been reduced.”

### Reliable support

“Hospitals are important places for embracing new lives and safeguarding health,” An explained. “We need to ensure all of our hospital equipment and systems are running efficiently and stably 24 hours a day.”

To make sure this happens, there are a



number of Schneider Electric solutions at work for Huashan Hospital North, allowing staff members greater control and more visibility than ever before. They include:

- ATS automatic transfer switch
- PowerLogic™ power and energy meters
- C-Bus series Lighting Control
- SmartX IP Controllers, actuators, sensors, and valves
- EcoStruxure Building Operation
- EcoStruxure Power Monitoring Expert
- EcoStruxure Power Advisor

With EcoStruxure in place, Huashan Hospital North has:

- Increased management efficiency by 20% and reduced energy consumption by 18%
- Better supervised electrical equipment to identify potential hazards
- Monitored the power quality of medical devices to improve operation efficiency
- Centralized management of air conditioning and lighting systems, saving labor and energy costs

“We need to ensure all of our hospital equipment and systems are running efficiently and stably 24 hours a day.”

— Dong An,  
Director, Logistics  
Management Office,  
Huashan Hospital North  
at Fudan University

“Schneider helped our hospital optimize the quality and efficiency of management services by creating a smart logistics center,” An said. “Schneider can provide us with new products to further improve efficiency and reduce energy consumption.”

### A healthy future

By incorporating digital tools, Huashan Hospital North has made remarkable progress in energy conservation and efficiency, and is actively promoting the construction of intelligent logistics.

As the hospital staff is encouraged by the results and progress, the relationship between Huashan Hospital North and Schneider Electric will continue to grow in the future.

“We’ll continue to work with Schneider Electric in the future to build a smart green hospital that delivers a safer, more reliable and more comfortable experience to our patients,” An explained. And that means medical education, patient health, and peace of mind for years to come.

20%

increase in management efficiency

18%

reduction in energy consumption

## EcoStruxure™ for Building Innovation At Every Level



# EcoStruxure™

## Innovation At Every Level

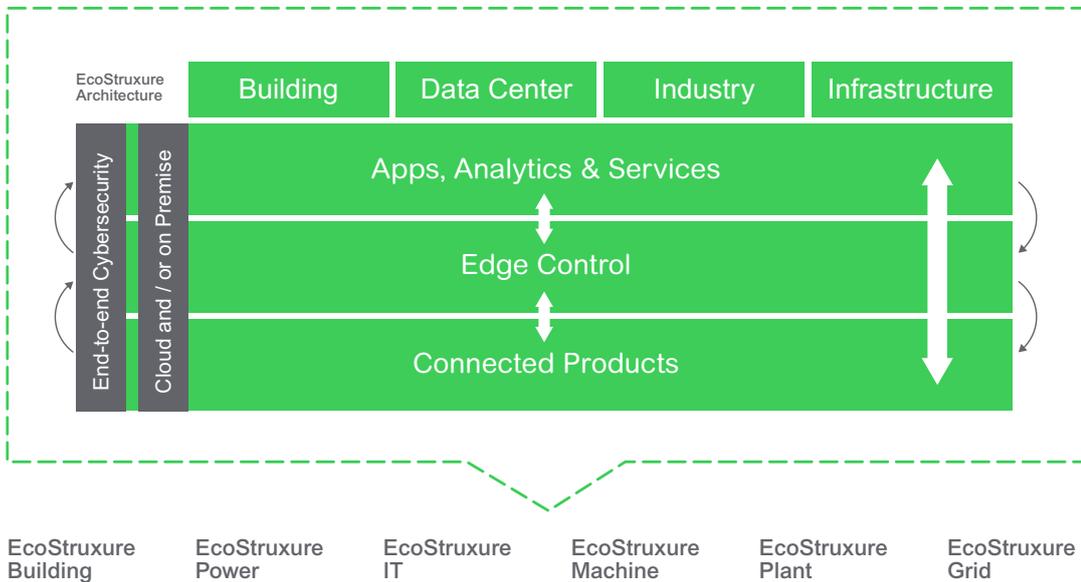
IoT-enabled solutions that drive operational and energy efficiency

EcoStruxure is Schneider Electric’s open, interoperable, IoT-enabled system architecture and platform.

EcoStruxure delivers enhanced value around safety, reliability, efficiency, sustainability, and connectivity for our customers.

EcoStruxure leverages advancements in IoT, mobility, sensing, cloud, analytics, and cybersecurity to deliver Innovation at Every Level including Connected Products, Edge Control, and Apps, Analytics & Services. EcoStruxure™ has been deployed in 480,000+ sites, with the support of 20,000+ system integrators and developers, connecting over 1.6 million assets under management through 40+ digital services.

One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise



### Connected Products

The Internet of Things starts with the best things. Our IoT-enabled best-in-class connected products include breakers, drives, UPSs, relays, sensors, and more. Devices with embedded intelligence drive better decision-making throughout operations.

### Edge Control

Mission-critical scenarios can be unpredictable, so control of devices at the edge of the IoT network is a must. This essential capability provides real-time solutions that enable local control at the edge, protecting safety and uptime.

### Apps, Analytics & Services

Interoperability is imperative to supporting the diverse hardware and systems in building, data center, industry, and grid environments. EcoStruxure enables a breadth of agnostic Applications, Analytics, & Services for seamless enterprise integration.

Find out more about EcoStruxure

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## Schneider Electric

Andover R&D Center  
800 Federal Street  
Andover, MA 01810 USA  
Phone: + 1 978 794 0800

[schneider-electric.com](http://schneider-electric.com)

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