# Medical Provider Upgrades to Vertiv UPS for Uptime of Critical Equipment



A Vertiv Case Study



## Background

The customer is one of the leading private hospitals in Thailand, with over 200 beds and various medical centers, including a stroke center, breast center, and hearing and balance center. Priding itself of providing top-notch medical care and specialized services, the customer was looking for a solution to help protect and ensure uptime in its critical medical equipment.

In its search, the customer was looking for a high-quality, high efficiency uninterruptible power supply (UPS) solution to replace its ageing UPS to support its Magnetic Resonance Imaging or MRI device.

## Challenge

Round-the-clock availability of lifesaving healthcare equipment is the primary concern for the hospital. It needed UPS units that could provide seamless backup power during both planned and unplanned outages, specifically for its MRI device. The hospital's IT director was also looking for a solution that was easy to install, power up and maintain. It had an existing UPS, but this was no longer enough to support the hospital's growing operations **Challenge:** A high quality, high efficiency power protection solution for its MRI device

Solution: Vertiv™ Liebert® EXM2 120kVA UPS

### **Results:**

- Robust power back up in the event of unexpected power outages
- Helped ensure around-the-clock availability of lifesaving systems and equipment
- Simplified installation, management, and maintenance of the hospital's backup power solution.
- Extended UPS service life and battery run time.
- Modular power distribution technology offers complete end-to-end protection to critical loads.

## Solution

MRI machines use a powerful magnetic field that is close to thousand times the strength of a typical small magnet. It uses this magnetic field to scan the human body. This device requires a robust, industrial-grade UPS that can work under severely stressed conditions to handle the high inrush current of MRI scanners without affecting the power quality or without derating it. Understanding this, Vertiv deployed the Vertiv<sup>™</sup> Liebert<sup>®</sup> EXM2 UPS to provide power protection to the hospital's MRI machine. Because an MRI machine utilizes a large amount of power, the hospital needed a mid-size UPS that can support the power requirements for the equipment.

The Liebert EXM2 UPS proved to be the best choice to power MRI machines. With its Dynamic Online mode feature, the Liebert EXM2 provides up to 98.8% efficiency, maximizing energy usage while securing the load against grid events, ensuring uptime when it is most needed. In addition, the Liebert EXM2 can sustain high ambient temperatures of up to 50 °C, making it the best UPS to support high powered devices such as an MRI machine.

With its lithium-ion battery compatibility and double conversion efficiency, the Liebert EXM2 offers the highest efficiency and lowest total cost of ownership (TCO) for the hospital.

## **Results**

Vertiv delivered and installed the Liebert EXM2 UPS in the hospital without any inconvenience. Its flexible and optimized design has adapted well into the hospital's existing infrastructure, with minimal changes needed to the floor plan. The Liebert EXM2 is also compact and lightweight, occupying a small footprint, making it ideal for hospital environment.

The hospital was very pleased with the Liebert EXM2's performance and continue to provide the best medical care for their customers.



Liebert EXM2 100 - 250kVA

To learn more about the Vertiv Liebert EXM2, visit Vertiv.com

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