

The Smart-RTU®

Cooling costs average 60-70% of the total energy costs of a facility. The Smart-RTU® modulates the rooftop unit and the capacity of the air and water source heat pumps to match the dynamic nature of facility cooling or heating loads. As a result, energy waste is minimised and indoor comfort is improved. Because of its unique operating principles, the Smart-RTU® achieves greater savings than any other product on the market.

- Existing Building Automation System (BAS), Thermostat & HVAC controllers remain in place
- Better maintains the room temperature set-point and humidity
- Reduces compressor cycling
- Reduces operating and maintenance costs
- Reduces noise and vibration

✔ Is the Smart-RTU® right for your facility?

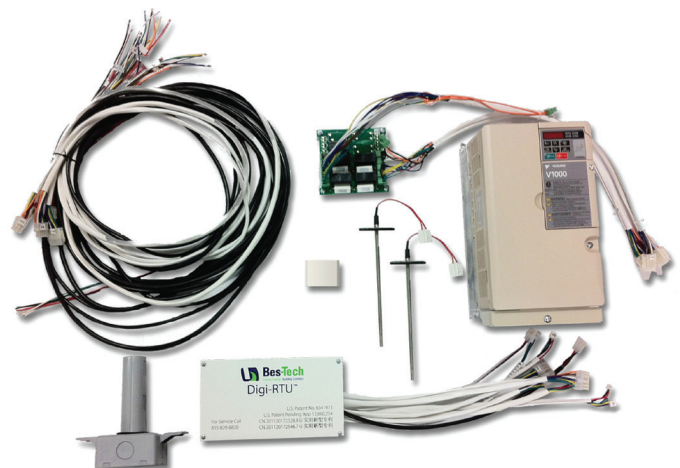
- Installed on rooftop units having a capacity of between 3 to 55 tonnes
- The Smart-RTU® saves significant expenses by reducing energy consumption by up to 40%. This makes it ideal for facility owners and tenants
- The Smart-RTU® is an excellent Demand Management tool that reduces demand by up to 30%
- Scalable turn-key approach with sustainable annual results

🖥️ Smart-RTU® Applications

- Up to 4 cooling and 2 heating stages
- Integrates with any existing thermostat and Building Automation System (BAS)
- Demand Control Ventilation CO₂ satisfies ASHRAE 62.1 and California Title 24 requirements
- Economiser

📊 Remote Monitoring & Control (Optional)

- KWh consumption
- Temperature and set-point
- VFD speed
- Damper position
- Space CO₂ level
- Historical Trending
- HVAC unit ON/OFF



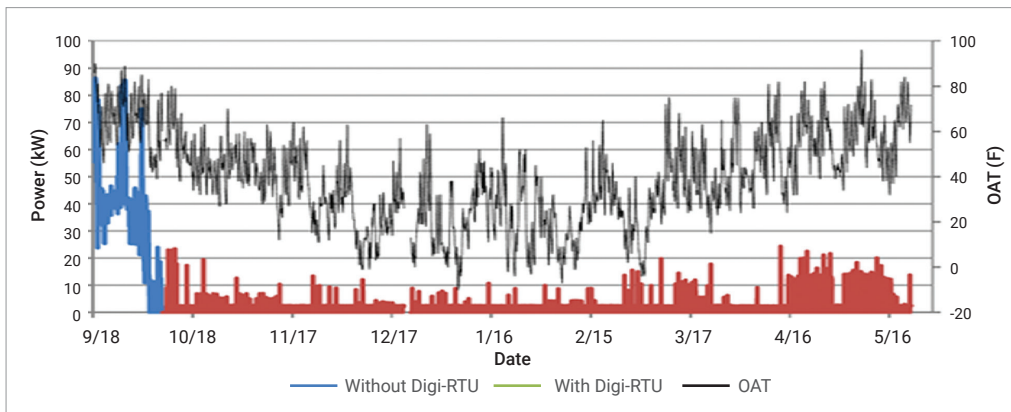
⚠️ Fault Detections & Diagnosis (Optional)

- Space temperature and humidity outside of set-point
- Fault detection; fan mode, room temperature set-point, and operations schedule
- Loose fan belt
- Duct blockage and dirty filter
- Low or high compressor refrigerant charge
- Outside air damper failure
- Heater failure



Case Studies

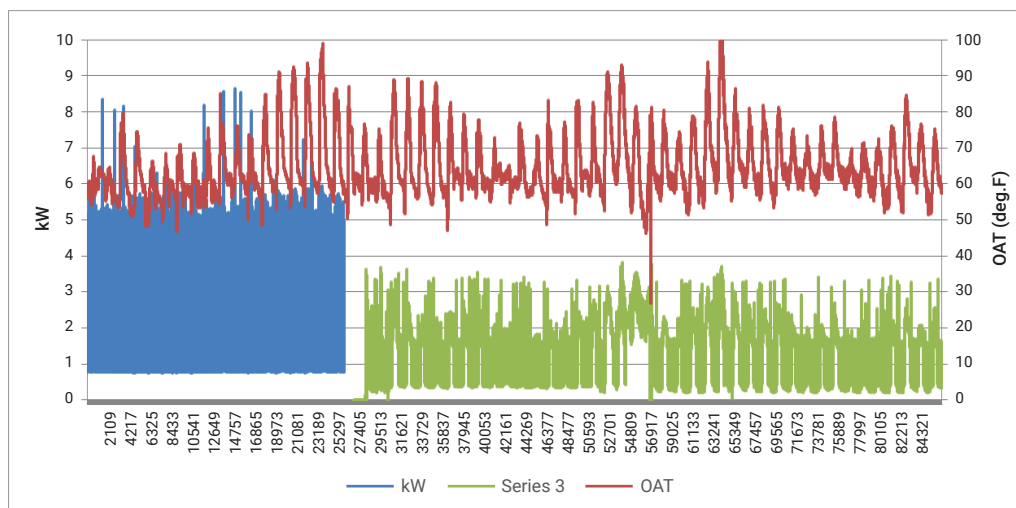
HVAC Rooftop - Pharmaceutical Distribution Centre



50% decrease in kW Consumption

PRE POST AMBIENT TEMPERATURE 5-MINUTE INTERVALS

Office Spaces



32% decrease in kW Consumption

PRE POST AMBIENT TEMPERATURE