

Solution: Intesis AC Cloud Control
Country: Kingdom of Saudi Arabia
Company: Smart Controls Systems
Summary: Reduction and control of energy consumption of existing AC splits units of different brands distributed in a university campus.

Benefits

- Advanced control of the air conditioners for energy management purposes
- By optimizing AC efficiency, the solution has significantly reduced CO2 emissions
- A solution compatible with any AC brand
- The ACCC solutions adapts to any size of projects and grows where the buildings complex grows



Smart Controls Systems

“AC Cloud Controls saves energy by optimizing the splits set temperature based on occupancy levels and time schedules, thanks to its 365-calendar”

Venkatesan Kannan,
Business Development Manager

MEP Middle East Awards 2024

On September 19th, the MEP Middle East Awards 2024 recognized a groundbreaking air conditioning control project at a world-class healthcare and university complex in Saudi Arabia with the prestigious “Smart Project of the Year” award.

The project involved the installation of 1340 Intesis AC Cloud Control gateways (model INWFIUNI001I000) which was a key component for ENGIE, the Energy Service Company (ESCO) in charge of the retrofitting project at a world-class healthcare and university complex in Saudi Arabia.

The company selected by ENGIE for implementing the AC solution was Smart Controls Systems. The retrofitting project achieved an impressive 20% energy savings.

The Project

A leading medical university in the Kingdom of Saudi Arabia had an annual energy consumption of 133 GWh in 2019. As part of a comprehensive modernization effort to meet the Saudi Arabia’s Vision 2030 for sustainable development and environmental goals, the university implemented a strategic retrofitting plan aimed at optimizing energy usage across air conditioning, ventilation, and other mechanical and electrical systems.

The need

At this university, one of the main challenges was the wide variety of air conditioning (AC) brands spread across different areas of the campus, making difficult to manage all units in a unified and efficient way. Most of the AC units on the premises were split-type and operated continuously or for extended periods at very low setpoints, leading to an excessive energy use.

The ESCO needed to implement strategies to reduce energy consumption, with the primary objective being to control AC units through time schedules and occupancy sensors. The Intesis AC Cloud Control system was selected as the optimal solution to achieve this goal.

Why Intesis

The Intesis AC Cloud Control (ACCC) solution offers an ideal product for managing split-type AC units. The INWFIUNI001I000, an infrared (IR) gateway, is compatible with any AC unit equipped with an IR receiver. This gateway has a built-in IR receiver, and also has a binary contact to add a presence or window contact sensors.

Key factors in selecting Intesis included its 365-day calendar and setpoint limits, which enable the university to have a precise control of the AC usage and settings. The system applies time schedules, occupancy sensors, and different setpoints at various times to optimize energy management effectively.



Benefits achieved

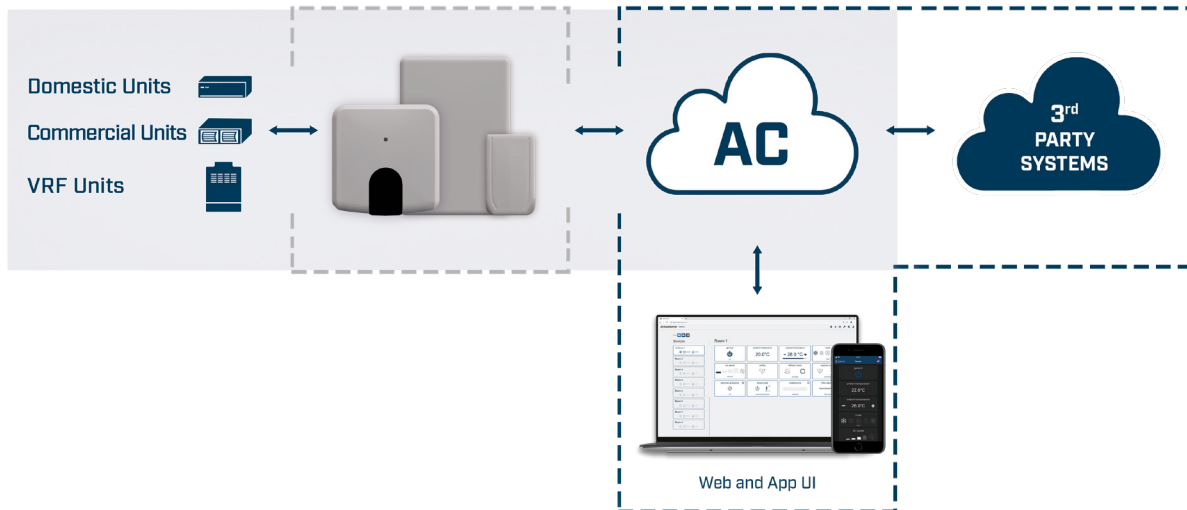
The ACCC has reduced the university energy consumption by optimizing the air conditioning set temperature based on occupancy levels, and based on time schedules.

The Cloud based APP and Web interfaces is user friendly to achieve the commissioning requirements. In the same account several ACCC gateways were added, and many zones and buildings created in the software to control closely.



About Intesis AC Cloud Control

The Intesis AC Cloud Control platform is a highly versatile solution designed for seamless compatibility with any air conditioning brand. A key feature of this platform is its ability to control multiple AC units through a single web interface or app, regardless of their location —whether within the same room or distributed across various areas of a building. This capability enables users to monitor and manage numerous units under one cloud account, making it especially well-suited for large facilities such as universities, hospitals, and commercial complexes. Its flexibility and ease of integration make it an ideal choice for both new installations and retrofitting existing systems.



About Smart Control Systems

Smart Controls Systems, founded in 2009 in Saudi Arabia, is a leading BMS system integrator with over 80 people, specialized in providing comprehensive MEP (Mechanical, Electrical, and Plumbing) solutions as well as Energy & ELV Projects for the construction and infrastructure sectors.

With a strong commitment to reducing environmental impact, the company focuses on creating safe, comfortable, and energy-efficient environments. Their end-to-end services are designed to meet the highest standards, encompassing every phase from planning and design estimation to equipment procurement, installation, maintenance, and technical support.

HMS Networks - Contact

HMS is represented all over the world.
Find your nearest contact here:

www.hms-networks.com/contact



Learn more at <https://www.hms-networks.com/intesis>

Owned by HMS Industrial Networks, Intesis® is a registered trademark in the European Union and is trademarked in the rest of the world. Other marks and words belong to their respective companies. All other product or service names mentioned in this document are trademarks of their respective companies.
Part No: INSSMEEN2024 Version 01.0/2024 - © HMS Industrial Networks - All rights reserved - HMS reserves the right to make modifications without prior notice.

