



ADVANCED PLANT CONTROL

OPERATION AND ENERGY CONSUMPTION OPTIMIZATION

> **HIGH ADDED VALUE SOLUTION**

SECURED HEATING & COOLING PRODUCTION

> **QUICK RETURN ON INVESTMENT**

COMPLYING WITH ENERGY REGULATIONS & BUILDING CERTIFICATIONS

PlantCTRL™

Management & monitoring system

The PlantCTRL™ regulates and controls all Carrier thermal production plants operation. This system is compatible with all existing and new Carrier equipment from two to several chillers and / or heat pumps.

Available for all applications, this system is able to manage all cooling & heating production components and all associated hydraulic devices:

Chillers, heat pumps, cooling towers, dry coolers, energy metering, valves and pumps.

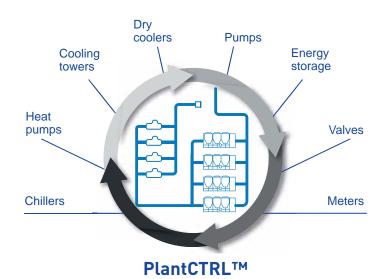




User interface



Remote monitoring



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MAIN FEATURES

Command & control your HVAC plant

- Production and operation strategy management
- Controlling and monitoring of chillers and heat pumps, drycoolers and cooling towers depending on the operation
- Controlling and monitoring of all hydraulic components of the installation (valves, pumps, frequency convecters,...)

Manage the energy

- Daily and seasonal programming
- Optimization of the chillers, heat pumps and hydraulic components cascading management
- Set-points configuration and optimization
- Energy management of the system (free cooling, energy recovery and other sources)

Secure the operation

- Faults / alarms detection and signaling, corrective management algorithms
- Equipment management alternation / rescue /prioritary network
- Preventive maintenance alerts scheduling
- View of the installation and equipment states

Monitor the installation

- On site local monitoring and remote monitoring through the dedicated Website
- View in real time of the equipment and installation states, access to installation synoptics, operation curves
- Events notification by mail (faults / alarms)
- Long-term saving of recorded values, events & curves

CAPACITY

- Management of the chillers, heat pumps, drycoolers, cooling towers, pumps and valves
- Energy metering, flowmeters, temperature sensors and pressures
- Energy recovery and free cooling
- Coupling with other energy sources (EnR, boilers, geothermal....)
- Communication with all BMS
- Other communication by open protocols and non Carrier equipment (BACnet IP, MS/TP, Modbus TCP / IP, Modbus RTU and LonWorks,...)

PHYSICAL CHARACTERISTICS

- Available in box version for both new and existing equipment (an integrated option for electrical cabinet is available)
- Dimensions and weights according to configuration and options
- IP54 steel enclosure

- Enclosure power supply: 100-230 VAC, 50 / 60Hz
- Operating temperature range: -10 °C to +50 °C
- Humidity: 0 to 90% RH, non-condensing
- Storage: -20 °C to +60 °C, 0 to 90% RH, non-condensing

USER INTERFACE



/ REMOTE MONITORING



OPTIONS

It is possible to monitor the installation locally from the user interface of the PlantCTRL™ box or from a PC.

You have also the possibility to monitor the installation remotely from a PC/tablet with internet access.

The PlantCTRL also communicates with the BMS.

The three monitoring options provide access to all equipment operating parameters in real time:

- Installation synoptics
- Operating curves
- Schedule programming
- Event reports
- Components states
- Recorded data

SOLUTION ADVANTAGES

Expert in plant management:

- System and control expertise
- Commissioning and installation support
- One supplier to facilitate the installation
- Ergonomic and easy friendly user interface
- Optimized operation sequencer

Flexible and scalable solution:

- Tailor-made solution for existing and new plants
- Suitable to process & comfort applications
- Compliance with all BMS
- Fully configurable according to building evolutions
- 24/7 plant monitoring

Costs management and profitability:

- Real-time operating and maintenance costs management
- Quick Return On Investment
- Carrier service experts support

Secured installation:

- Maximize equipment lifetime
- Improve equipment efficiency
- Secure the plant operation
- Facilitate better production availability

Energy optimization:

- Manage energy consumption
- Energy optimization during the lifetime of the installation
- Preventive maintenance to ensure the durability of equipment

Comply with energy regulations:

- LEED, BREEAM and HQE credits
- Value of sustainable energy solutions (free cooling, energy recovery,...)
- Contribute to develop energy efficiency of buildings (local and European regulations)

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