



Efficient, high-performing Carrier HVAC solutions

# DESIGNED FOR THE DATA CENTER



# Lifecycle solutions for complete data center optimization

Data centers have never been more strategic or critical than they are today. They have also never faced greater scrutiny regarding efficiency, availability and flexibility. As your data center evolves, you need cooling system solutions – **and a trusted partner** – that can evolve with it.

At Carrier, we're always here with purpose-built solutions and expertise to help you face all your data center challenges with confidence.

Our HVAC equipment delivers essential cooling while reducing both your energy consumption and carbon footprint. Our management systems integrate building and IT infrastructure to provide greater visibility and optimization. Our service and support ensure peace of mind and help enable continuous operations. **And as a truly global partner, we're there wherever and whenever you need us.** It all adds up to the confidence you need to operate with optimized performance at every stage of the data center lifecycle – and at Carrier, it's delivered by design.

## Next-level, integrated management solutions Designed for the data center

### Integrated Data Center Management (IDCM)

Integrated Data Center Management offers the next level of insight and control for today's increasingly complex computing and supporting infrastructure. IDCM tightly integrates the various systems within a data center in new and unique ways for energy savings, reduced costs and improved resiliency. IDCM is built with best-in-class technology from Automated Logic and Nlyte, unifying the worlds of Building Management Systems and Data Center Management.

### Nlyte Asset Optimizer

Bring automation and efficiency to asset lifecycle management, capacity planning, workflow integration and audit and compliance tracking with an open and scalable software solution designed for the data center. Nlyte Asset Optimizer simplifies space and energy planning and connects seamlessly with IT Service Management (ITSM) and business intelligence applications, making it easy for you to manage any asset, from receiving dock to decommissioning, in any enterprise, colocation or edge facility globally.

### Nlyte Energy Optimizer

Monitor power and cooling. Deliver threshold alarming. View real-time and historical analytics. It's all possible with Nlyte Energy Optimizer, a highly scalable, hardware-agnostic solution that manages and tracks the data center power chain. Take advantage of its powerful capabilities designed to help improve energy consumption, reduce disruption and track performance across all your locations.

### PlantCTRL or iVu® Building Automation System

The PlantCTRL system integrates all chiller system components into a seamless, automated network customized to your plant's design and specifications. The PlantCTRL system is plug and play compatible with the Carrier i-Vu® Building Automation System (BAS).

The iVu® Building Automation System brings all your building's subsystems together with one web-based platform that makes it easy for you to understand, control and analyze data center operations. Take advantage of powerful visualization tools, robust procedural tracking and secure user verification options to implement intelligent strategies for balancing power usage effectiveness with the conditions needed to maximize uptime and adhere to service-level agreements.



# Efficient, high-performing HVAC solutions

## Designed for the data center



AquaForce 30XF

### AquaForce® 30XF air-cooled screw chiller

Air-cooled chiller range with variable-speed screw compressors, R-1234ze refrigerant, covering cooling capacities from 390 kW to 2.100 kW with integrated free-cooling and ultra-fast recovery option for small to large-size data centers cooling.



AquaSnap 30RBP

### AquaSnap® 30RBP air-cooled scroll chiller

Air-cooled chiller range with multiple scroll compressors, R-32 refrigerant, covering cooling capacities from 170 kW to 950 kW with integrated free-cooling for small to medium size data center cooling.



AquaEdge Water-Cooled Chillers

### AquaEdge® water-cooled chillers

Carrier's water-cooled chillers combine innovative features, exceptional versatility and a full-system approach to efficient cooling up to 3.800 kW per unit. 19DV can restart swiftly following a power loss – just 150 seconds to reach full design capacity once power is restored



Computer room air conditioners

### Computer room air conditioners

Direct expansion cabinet with vertical airflow and exterior air condensation unit: 50CJ-X. Ideal for small or low-density data centers.



AquaForce 61XWHZE

### AquaForce® 61XWHZE high-temperature water source screw heat pump

Water source heat pump range with fixed-speed screw compressors, R-1234ze refrigerant, covering heating capacities from 300kW to 1.570 kW that can value data center heat to generate up to 85°C hot water for district heating systems.

### Computer room air handlers

Chilled water cabinet with vertical airflow: 50CJ-W, 50CO-W and tailor-made units. Freedom to specify the optimal system with moderate-to-high availability requirements in medium and large data centers.



Computer room air handlers (fan-wall)



Computer room air handlers

### Computer room air handlers (fan-wall)

Modular design with high flexibility for customization. Horizontal airflow. Particularly suitable to get the lower consumption in large or high-density data centers with high availability requirements.

## Complete lifecycle service and support

### Designed for the data center

#### BluEdge® Service Solutions

The BluEdge service platform delivers expertise, service and greater peace of mind throughout the lifecycle of your HVAC equipment. Our service tiers offer a range of options, all powered by remote connectivity – your source for actionable insights that can reduce operating costs, increase efficiency and improve uptime.

#### Carrier Rental Systems

Carrier Rental Systems can help you maintain data center uptime when temperature control is interrupted by scheduled upgrades or unforeseen events. With customized plans according to your timeline, budget and available space, you can use our readily available rental units to ensure continuous operations while you select, order and receive new equipment.





# Carrier HVAC Solutions Data center benefits at a glance

## IDCM Benefits

- Increased efficiency of power, cooling and space by matching capacity with actual and forecasted demand
- Minimized disruption from planned maintenance or unforeseen failures of power, thermal or building systems
- Improved reliability through end-to-end, unified visibility of all critical systems

## Integrated BMS Benefits

- Dashboard metrics & automated PUE - real-time, intuitive and comprehensive view of all relevant information on one page.
- Chiller plant energy optimization - cooling when and where you need it, continuously and consistently.

## Equipment Benefits

- Meets strict environmental requirements necessary to ensure uptime and keep your servers running cool around the clock
- Supports reaching your budget and sustainability goals by reducing energy consumption and carbon footprint
- Equipment, components and features designed for service efficiencies

## Service Benefits

- Reliable, 24/7/365 service and support for HVAC system
- Readily available rental equipment minimizes disruptions during upgrades or replacements
- Intelligent digital solutions enable advance notifications, remote diagnostics, decision analytics and enhanced field service support to maximize operations
- Expert guidance, from system design to ongoing maintenance

We know that cooling is just one part of an optimized data center environment, that's why Carrier also offers a wide range of design services as well as fire and security systems to help keep your data center operating safely and securely 24/7. From system design, energy analysis and energy-as-a-service to aspirating smoke detection, incident management, mass notification, fire suppression, cloud-based physical access control, video surveillance with analytics and more, turn to the experts at Carrier.



At Carrier, **our solutions are designed for the data center** – and we're always here to provide the confidence you need to operate with optimized performance no matter how your demands evolve. **Contact your local Carrier expert at [www.carrier.com/commercial/en/eu/market-solutions/data-center/](http://www.carrier.com/commercial/en/eu/market-solutions/data-center/)**

