



Turn to the Experts in Data Center Cooling

BECAUSE  
UPTIME IS  
EVERYTHING



# Equipment, software, service, and support to maximize uptime, control costs, and mitigate risks.

For data centers, cooling is critical infrastructure: if it fails, your servers go down, too. It's also a major operating expense.

Count on Carrier for the industry-leading reliability, uptime, and fast recovery from power interruptions you need to protect your data—combined with the high efficiency under all loads that's essential to keeping your energy costs under control.

And that's just the beginning. All of our products and services are designed with a deep understanding of every aspect of what it takes to build, run, and grow a successful data center—from CAPEX, OPEX, and risk mitigation to system design and the day-to-day management of your facilities and equipment.

We're ready to help you determine the optimal cooling solutions for your data center based on your unique technical, business, climatic, and regulatory requirements. Whether you require cooling for in-house, cloud service, or colocation data centers—or for new construction, replacement, or temporary applications—turn to the experts at Carrier.

## Benefits of Carrier Data Center Cooling Solutions



### Your Data Center is Only as Reliable as its Cooling.

Carrier's field-proven equipment—plus powerful, easy-to-use software and monitoring capabilities—is all designed and tested to help keep your servers running cool around the clock and all year long.

**O C R F D**



### Chill Out Faster After a Power Interruption.

When every extra second increases the risk of your servers overheating, Carrier's advanced Capacity Recovery echnology quickly gets your chiller back up and running at your required capacity.

**R F D**



### Maximize Energy Efficiency 24/7—in All Seasons.

Day or night, winter or summer, Carrier chillers deliver optimum energy efficiency at every load point.

**O S**



### Reliably Efficient and Easy to Service for Lower Operating Costs.

Carrier's industry-leading efficiencies keep your energy costs—typically 35-40% of operating expenses in most data centers—under control. And all Carrier hardware is designed to streamline operations by making maintenance fast and easy.

**O S**



### Keep IT Connected and Informed—Automatically.

Your facilities personnel aren't the only ones who need to know what's happening with your cooling system. Your IT people do, too.

Let our experts help you build an automated controls solution that reliably keeps both departments informed about system status—in real time. So if an issue arises, IT can immediately take action to protect data integrity while your facilities technicians focus on preventing or minimizing any disruption in cooling.

**R F D S**



### Build a Cooling System That Can Grow with You.

Carrier's experts are ready to deliver a modular solution so you can quickly and cost-effectively expand your cooling capacity as your data center grows—helping you to control and manage capital and operating expenses, now and in the future.

**O C F S**

#### Benefits Key:

- O** OPEX
- C** CAPEX
- R** Risk Mitigation
- F** Facilities Management & Operation
- D** IT/Data Protection
- S** System & Building Design/Engineering

## Carrier Products and Services for Data Centers

When it comes to keeping data centers cool, Carrier has it all—from high-efficiency air- and water-cooled chillers to standard and custom air handlers to system controls, software, service, and monitoring systems...even rentals. Here are a few examples:



23XRV

In a GSA Proving Ground study, Carrier's **23XRV water-cooled screw chiller** proved to be 11% more efficient than a competitor's highly touted magnetic bearing chiller.\* With a variable-speed range twice that of other chillers, it delivers surge-free performance, quiet operation, and a unique compressor design that minimizes the need for scheduled maintenance. Learn more at [carrier.com/prof](http://carrier.com/prof).



30XV

With full-load EER values above 11.0 and IPLV values above 21.0, the Carrier **30XV air-cooled chiller** delivers industry-leading efficiency and sound levels in a small-footprint package that's easy to install, easy to service, and highly reliable. For even greater energy savings in applicable climates, add free cooling with the optional waterside economizer.



19DV

The Carrier **19DV centrifugal chiller** has won numerous major awards worldwide by combining innovative features, incredible versatility, and a full-system approach to efficient cooling, including Capacity Recovery that restarts to 100% load in 125 seconds.\*\* The result is a chiller that's so reliable, so high-performing, and so technologically advanced that once it's installed, you may never have to think about it again.



39DC

Suitable for both outdoor and indoor use, Carrier's **39DC custom double-wall air handler** gives you the freedom to specify the optimal system for your precise requirements—helping to simplify installation and achieve more efficient results.

### Carrier Service and SMART Service



Choose from a complete range of maintenance, monitoring, and emergency-response service plans, including Carrier SMART Service—an exclusive suite of digital solutions that enable advance notifications, remote diagnostics, decision analytics, and enhanced field service support.

### Rental Equipment

Stay cool during upgrades and replacements. Our readily available rental units give you time to select, order, and receive your new equipment with minimal disruption.



### Controls

Monitor your entire data center—and maintain precise temperatures 24/7—through a single user interface with Carrier's i-Vu® building automation system (BAS). Get powerful alarms management, seamless integration with third-party subsystems and enterprise software applications—plus instant access to reporting, analytics, and dashboards for faster, more effective decision-making.



\*When measured across a broad range of operating conditions, Variable Speed Screw technology, as used in the Carrier 23XRV chiller, was 11% more efficient than mag bearing technology. Source: [www.gsa.gov/gpg](http://www.gsa.gov/gpg), GPG Program Summary, GPG-031, Aug. 2017, Variable-Speed Direct-Drive Screw Chiller. The GSA study referenced herein does not constitute a product endorsement, recommendation, or preference by the U.S. Government or any agency thereof, or the Pacific Northwest National Laboratory/Oak Ridge National Laboratory.

\*\*When backed up by a UPS (uninterruptible power supply).



# Trust. Worthy.

**Ever since Carrier invented modern air conditioning in the early 20th century, we've been at the forefront of innovation,** advancing cooling technology while helping to make new

industries possible and existing ones more efficient and cost-effective. Today, we focus the full depth of our engineering knowledge and practical experience on meeting the unique challenges and

demanding requirements of data centers—and delivering the precise and reliable temperature and humidity control that keeps critical IT infrastructure running smoothly.

## Carrier Offers a Full Spectrum of Cooling Solutions for Data Centers

Turn to Carrier for reliable performance. High energy efficiency 24/7/365. Fast recovery of full capacity after power interruptions. Full-featured controls, monitoring, and alerts—on site and off. And more.

Our data center products and services include:

- Air-cooled chillers (with or without waterside economizers)
- Water-cooled chillers
- Custom and standard air handlers
- Hardware and software for local and remote control and monitoring
- EcoReports™—reporting and analytics to ensure optimal performance
- Maintenance, monitoring, and emergency-response service plans
- Rental equipment
- Expert application and system design assistance



SERVICE



EQUIPMENT

CONTROLS

### Talk with an Expert in Data Center Cooling Today.

Looking for solutions for a cooling issue? Need a proposal or quote for your next project? Have questions or want more information? Get in touch with your local Carrier expert—contact us by phone at **888-272-8860** or email us at **NationalAccounts@carrier.com**.



Turn to the experts

[carrier.com/datacenters](http://carrier.com/datacenters)