Room Cooling

Chilled Water IT Cooling Air Conditioner

Available from 150 to 300 kW

w-MEXT-XL

MITSUBISHI ELECTRIC

w-MEXT-XL

DESIGNED FOR **EFFICIENCY.** BUILT FOR **IT COOLING.**

From standard to standout: this range lets you tailor design, capacity, and controls to your needs.

4 sizes, 2 versions from 150 to 300 kW

Chilled water IT cooling air conditioner, available from 150 to 300 kW, ideal for large facilities such as **Hyperscale and Colocation Data Centers.**
It can be installed in the technical corridor or directly in the room with raised floor, to ensure maximum flexibility.

Thanks to the versatility of the different air flows available and the three coils, optimized for different water side temperature, **the w-MEXT-XL range** perfectly adapts to any layout and operating condition, offering excellent performance and maximum compatibility with the demands of modern data centers.

Many Plus in a Single Unit

Versatility

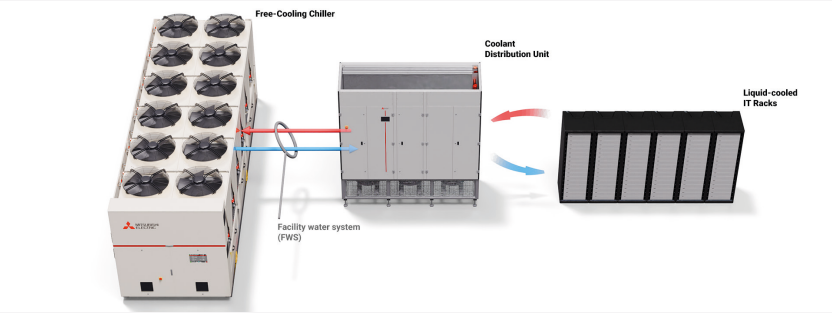
A wide choice of coils, versatile hydraulic connections, multiple air delivery versions, and a range of sizes to fit every need.
The unit can be installed in the technical corridor or directly in the room to ensure maximum flexibility.

Design

Engineered to make the unit exceptionally easy to customize for any specific requirement.

Integration

The W-MEXT-XL chilled water air conditioner is the perfect match for Mitsubishi Electric Free Cooling Chillers, delivering efficiency, reliability, and seamless integration.



Accessories

An extensive selection created to cover every requirement, refined through years of industry insight.
Hydraulic connections can be oriented from the bottom, top, or side, making installation easier in any layout. We've also integrated advanced accessories like the Automatic Transfer Switch, which ensures continuity in case of power failure, and the Fast Restart system with backup battery, allowing the unit to restart in just a few seconds. EPIV valves provide precise control even under pressure imbalances, and harmonic filters protect sensitive components by reducing electrical distortion.

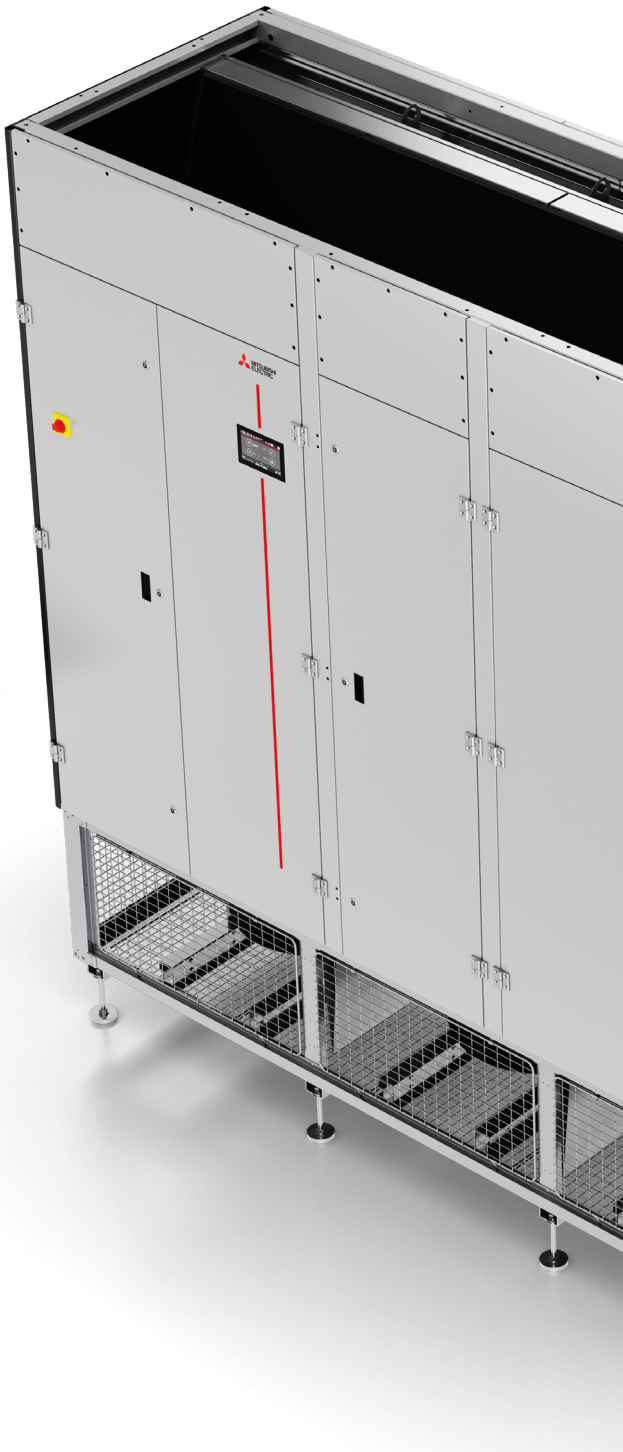
Efficiency

High-performance cooling designed for IT excellence ensuring maximum uptime, energy savings, and seamless operation.

Service

Designed for effortless maintenance, the unit offers Frontal accessibility access to all components, EC fans on sliders for quick service and replacement, and easy filter changes directly from the front doors.

Technological Choices



High Efficiency Filters

Advanced Filtration for Maximum Operational Efficiency Thanks to their ePM10 50% rating, the new filters offer a higher level of treatment and purification than traditional COARSE 60% filters, ensuring more effective protection of IT equipment and better air quality. But the innovations don't stop there: the use of micro-pleating technology keeps pressure drops lower, improving the overall efficiency of the unit. This means lower energy consumption and greater operational sustainability.

Chilled Water Coil

Equipped with chilled water coil with copper tubes and high-efficiency aluminum fins, this unit features a state-of-the-art fan section with the latest generation of EC plug fans.The flexibility to fit different types of fans, the chance to select between different coil depending on the design of the hydraulic circuit and the room conditions, and the clean and compact frame design complete a solution designed to stand out in every aspect.

Fan Section

Latest generation EC fans that guarantee high efficiency and airflow up to 70.000 m³/h.
In addition, there are available the fans with embedded active harmonic filters to reduce the Harmonic distorption

Smart Control with Evolution+

The unit is managed by our Evolution+ controller, equipped with a microprocessor and an interface with an intuitive graphic display. This technology allows for complete, real-time monitoring of operating states and alarms, ensuring maximum usability and total control. Furthermore, thanks to integrated LAN connectivity, the unit is ready for integration into remote supervision and management systems, offering uncompromising operational efficiency and responsiveness.

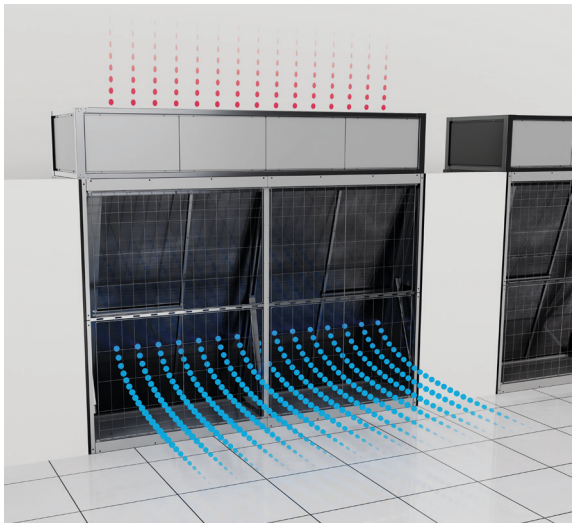
Multilanguage

Intuitive icons

Real-time display

Quick menu access

Available Versions



Downflow

In the downflow configuration, cooled air is delivered downward into the raised floor and distributed through perforated tiles to the racks. This ensures precise, efficient cooling and optimal temperature control for data center environments.

Rearflow

In the rearflow configuration, cooled air is discharged from the back of the unit directly toward the racks. This setup provides efficient, targeted cooling and uniform temperature control in data center applications without the need for a raised floor.

Smart Accessories for Customized Performance

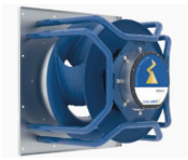
The w-MEXT-XL range is designed to deliver maximum flexibility, reliability, and adaptability thanks to a series of advanced accessories that meet the most complex needs of modern data centers.

Optimized Water Coils

Three different water coils are available for each size, designed for different water-side ΔT. This choice allows for easy adaptation to different operating conditions, ensuring versatility and top performance in every environment.

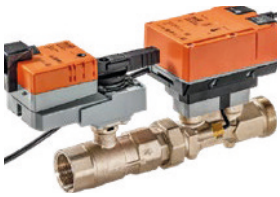
Integrated Harmonic Filters

The fans are equipped with active harmonic filters that reduce total harmonic distortion (THD), improving the quality of the power and grid voltage. This minimizes the risk of failures and provides enhanced protection for sensitive electronic components.



EPIV Valves Smart Control

EPIV Pressure Independent valves guarantee precise control even in the event of unbalances in the hydraulic circuit. The result is stable, efficient, and reliable control of thermal flow. Thanks to a dedicated function, it is also possible to calculate cooling power, even in the controller.



Flexible Hydraulic Connections

Hydraulic connections are available with bottom, top, or side orientation, facilitating the integration of the unit into any system layout. A solution that simplifies installation and optimizes available space.

Mitsubishi Electric
Data Center Solutions

Your one-stop solutions for critical power and cooling.

Critical Cooling Solutions

Chiller & Air conditioner

Our air-cooled and water-cooled chillers are available with scroll, screw, or oil-free centrifugal compressors, covering capacities from 15kW to over 4MW. Together with direct expansion and chilled water air conditioner we are able to fulfill all the mission critical requirements.

Liquid Cooling

In the era of AI, the data center power density is reaching levels never touched before.
Air-based cooling alone cannot meet the demand. Our solutions for liquid cooling perfectly fit the new hybrid cooling concept, bringing efficiency, higher cooling density and seamless monitoring and control. As the demand for liquid cooling increases, efficient water distribution becomes essential. We are set to launch our Cooling Distribution Unit (CDU), featuring advanced controls that enable precise regulation of cooling water temperature, preventing overheating and ensuring optimal performance of IT equipment.

Critical Power Solutions

Critical power: Ensure business continuity with Mitsubishi Electric's critical power solutions.

In the rapidly evolving digital landscape, uninterrupted power supply is critical for maintaining data center operations. We offer mission-critical containerised, modular and skidded Critical Power Stream PODS, or Power Train Units, medium voltage solutions, low voltage solutions, UPS (Uninterrupted Power Supply), and back-up generators of the highest quality.

DCIM Solutions

Critical power: Ensure business continuity with Mitsubishi Electric's critical power solutions.

Iconics

Critical management: Comprehensive monitoring for data center performance optimization

Enhanced Visualisation Tools

Our DCIM solution includes advanced visualization capabilities, providing clear, real-time graphical representations of data center operations, enabling operators to quickly identify issues, monitor performance, and optimize resource utilization with greater precision.

Proactive Maintenance Planning

Leverages AI and machine learning to enable predictive maintenance by analysing patterns and trends within the data center, allowing for the anticipation of potential failure, reducing downtime, extending equipment life, and lowering overall maintenance costs.

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