News Release

November 27, 2026
Taikisha Ltd.

Taikisha and Mitsubishi Electric Conclude Memorandum of Understanding for Collaboration in Cooling Solutions for AI Data Centers

Taikisha Ltd. (Head Office: Shinjuku-ku, Tokyo; Representative Director, President: Masashi Osada; hereinafter referred to as "Taikisha") and Mitsubishi Electric Corporation (Head Office: Chiyoda-ku, Tokyo; President and CEO: Kei Uruma; hereinafter referred to as "Mitsubishi Electric") concluded a memorandum of understanding (MoU) on November 26, 2026, with the aim of collaborating on two-phase liquid cooling technology as part of their data center-oriented businesses.

As investors in ZutaCore Ltd. (hereinafter referred to as "ZutaCore"), the two companies will promote technical demonstrations of cooling solutions for data centers utilizing ZutaCore's two-phase liquid cooling technology, work to build and establish a reference design and promote its adoption in the market, and aim to further expand their data center-oriented businesses.



(From left: Masafumi Ando [Executive Officer, Group President, Living Environment & Digital Media Equipment Group, Mitsubishi Electric Corporation], Yoshihiro Matsuda [Director, Managing Corporate Officer, Chief Executive, Corporate Planning Headquarters, Taikisha Ltd.])

■Strategic Partnership with ZutaCore

Given the rapid adoption of generative AI in recent years, data centers have seen an increase

in the deployment of high-performance servers. At the same time, power consumption and heat generation are increasing as servers become denser and more advanced. The performance required of cooling systems is also increasing even further. This has led to a growing need for highly efficient cooling systems that can meet increasing cooling demands while reducing power consumption. One of the most promising options is liquid cooling.
Liquid cooling can provide localized cooling to heat sources, thereby reducing the air conditioning load compared to conventional air cooling. This technology is therefore expected to reduce the overall power consumption of data centers. Two-phase liquid cooling technology, which removes heat efficiently by leveraging the latent heat of vaporization of a fluid, is garnering attention in particular as a technology that can simultaneously meet the needs of high-heat-density servers and reduce the power consumption involved in cooling. Based on this market environment and the technological potential, Taikisha has invested in ZutaCore, which boasts strengths in the form of its unique two-phase liquid cooling technology.

■Two-Phase Liquid Cooling Technology
Two-phase liquid cooling technology removes heat by leveraging the latent heat of vaporization when a fluid changes phase from liquid to vapor. The fluid absorbs heat from high-heat-generating components such as central processing units (CPUs) and graphics processing units (GPUs) and evaporates, efficiently transporting large amounts of heat. AI data centers and high-performance computing (HPC) environments are seeing increases in density and heat generation. In such environments, this technology is expected to achieve both high cooling performance and reduced power consumption required for cooling.

■Collaboration with Mitsubishi Electric
Taikisha and Mitsubishi Electric have both invested in ZutaCore with the aim of encouraging the implementation of two-phase liquid cooling technology on a large scale, given the technology’s ability to handle the increasing density and advanced performance of servers. With this common objective, the two companies have agreed to collaborate on data center-oriented business development, with a specific focus on two-phase liquid cooling technology.
Based on the MoU, the two companies will promote joint demonstrations centered on ZutaCore's two-phase liquid cooling technology. Combining development and design technologies related to air conditioning and refrigeration equipment and control systems with engineering technologies and expertise ranging from data center design to construction, operation, and maintenance, the two companies will work to verify cooling solutions that cover server-side cooling, heat source equipment, and control.
Going forward, the collaboration will see the two companies move forward with the construction of a reference design applying two-phase liquid cooling technology. They will also aim to further expand their data center-oriented businesses by leveraging the expertise gained through the demonstrations.

About Mitsubishi Electric

Founded in 1921, Mitsubishi Electric has over a century of experience in delivering reliable, high-quality products and solutions. The company is a recognized global leader in manufacturing, marketing and selling electrical and electronic equipment and systems across a broad range of sectors, including public utility systems, energy systems, defense and space systems, factory automation systems, automotive equipment, building systems, air conditioning systems & home products, digital innovations, and semiconductor & devices.

About ZutaCore

ZutaCore develops and provides two-phase liquid cooling systems for AI data centers and HPC environments. This is a direct-to-chip, two-phase liquid cooling technology that cools CPUs, GPUs, and other heat-generating components directly, efficiently removing heat by utilizing the phase change of a fluid.

About Taikisha Ltd.

Taikisha is an engineering company engaged in the HVAC and sanitary systems business as well as the paint finishing system business. In the HVAC and sanitary systems field, the company provides design and construction services for a wide range of facilities, including offices, factories, research facilities, and data centers.

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