

**FOR IMMEDIATE RELEASE**

**No. 3625**

*Customer Inquiries*

*Media Inquiries*

Corporate Advertising Division  
Mitsubishi Electric Corporation

Public Relations Division  
Mitsubishi Electric Corporation

Adv.pr@px.MitsubishiElectric.co.jp  
www.MitsubishiElectric.com/

[prd.gnews@nk.MitsubishiElectric.co.jp](mailto:prd.gnews@nk.MitsubishiElectric.co.jp)  
www.MitsubishiElectric.com/news/

## **Mitsubishi Electric to Exhibit at CEATEC 2023**

*Introducing cutting-edge technologies and integrated solutions for sustainability in three zones:  
“Global environment protection”, “Safety/Security society”, “Vibrant lives of all people”*



Rendition of Mitsubishi Electric booth

**TOKYO, September 13, 2023** – [Mitsubishi Electric Corporation](https://www.mitsubishielectric.com) (TOKYO: 6503) announced today that it will organize an exhibition under the theme of “Pioneering together with innovative technologies. Towards sustainable society filled with smiles” at CEATEC 2023, which will be held at Makuhari Messe from October 17 to 20. CEATEC 2023 aims to be “a comprehensive exhibition of Society 5.0” covering all types of industries and sectors, as well as a catalyst for co-creation and social implementation.

The Mitsubishi Electric Group has positioned the realization of sustainability as the cornerstone of its corporate management. Having clarified five social challenge areas to focus on – “carbon neutral”, “circular economy”, “safety/security”, “inclusion” and “well-being” – the company is making efforts to address these through its businesses. In addition, through co-creation and by integrating knowledge within and outside the Group, Mitsubishi Electric Group plans to transform into a “Circular Digital-Engineering” company that provides evolved integrated solutions, thereby helping to address various social issues.

At the exhibition, the five social challenge areas will be shown in the following three zones: “Global environment protection”, “Safety/Security society” and “Vibrant lives of all people”, and the company will

showcase its cutting-edge technologies and integrated solutions aimed at contributing to the resolution of social issues through hands-on exhibits and demonstrations. In addition, the company's initiatives will be introduced on stage through video and narration.

## **Theme**

***Pioneering together with innovative technologies. Towards sustainable society filled with smiles.***

## **Exhibits**

### **1) “Global environment protection” Zone**

From among the five areas of social challenge, this zone will focus on Mitsubishi Electric's efforts to achieve “carbon neutral” and “circular economy”. It will showcase cutting-edge technologies and integrated solutions for environmental issues and resource and energy issues that need to be addressed on a global scale in order to realize a sustainable global environment.

- Energy & Facility solution

Enables the efficient utilization of renewable energy for sustainable global environmental protection and provides solutions to address labor shortages resulting from declining birthrates and aging populations.

- Plastic recycling DX solution “RaaS”<sup>1</sup>

Makes the sorting of plastic waste easier and purer than ever and enhances recycling rates by applying the latest digital transformation (DX) technology to plastic sorting processes, using static electricity.

### **2) “Safety/Security society” Zone**

From among the five social challenge areas, this zone focuses on Mitsubishi Electric's efforts to achieve a “Safe/Secure” society. It will showcase cutting-edge technologies and integrated solutions that address social issues such as labor shortages due to declining birthrates and aging and declining populations, minimizing the damage caused by natural disasters, and the avoidance or mitigation of man-made threats including crime deterrence and accident avoidance, aiming to realize a safe and secure society by addressing the risks people face in their daily lives.

- Automated driving (Level 4) mobility services

An unmanned automated driving mobile service, the first national project in Japan to be approved for Level 4 automated driving, equipped with a Mitsubishi Electric control system. Helps to address transportation issues such as labor shortages and an aging population, reducing the number of traffic accidents and providing mobility with comfort.

- 3D measuring application “Rulerless”<sup>®</sup>

Utilizes a LiDAR<sup>2</sup> scanner on a smartphone to generate a 3D model of a house and accurately measures the depth of any flooding. Enables surveys that currently need to be conducted by multiple people to be conducted by a single person, improving operational efficiency. Enables the prompt issuance of disaster victim certificates and supports the recovery of disaster victims.

---

<sup>1</sup> RaaS: Recycle as a Service

<sup>2</sup> LiDAR (Light Detection and Ranging): Sensors that emit light onto an object and measure distance by detecting the reflected light.

- Demonstration of light source module for laser optical communication in outer space  
Earlier this year, Mitsubishi Electric successfully demonstrated laser optical frequency control using a light source module; this produces a 1.5- $\mu\text{m}$  wavelength signal and is a key component of high-capacity laser optical communications to be deployed in outer space. Satellite images have recently been used for a variety of purposes, such as monitoring the sites of natural disasters and helping to protect forest resources, and verification of the performance of the light source module in space is expected to enable even more effective use of satellite images in the future.
- Tomographic imaging technology to visualize hidden objects with millimeter accuracy  
The first industrial tomographic-imaging technology<sup>3</sup> that uses 300GHz terahertz waves<sup>4</sup> for one-shot, one-direction measurements at any depth. Achieves transmission and tomographic imaging through obstacles such as cloth and plastic, something which is impossible with an optical camera, in a smaller unit and with less impact on living organisms than X-rays. Expected to simplify security inspections and to be utilized for non-destructive scanning on moving production lines.

### 3) ***“Vibrant lives of all people” Zone***

From among the five areas of social challenge, this zone will focus on Mitsubishi Electric’s efforts to achieve “inclusion” and “well-being”. It will showcase cutting-edge technologies and integrated solutions that reduce the impact of the physical limitations of age and disability, and enable, for example, the remote monitoring and care of elderly relatives, all helping to provide healthier and more comfortable lives.

- Delivery service using autonomous robots “Cartken”  
A delivery robot service offering excellent run ability, allowing robots to seamlessly move horizontally and vertically both indoors and outdoors. Addresses social issues such as labor shortages in the transportation and delivery industry and provides support for customers who are less mobile.
- Monitoring service for the elderly “MeAMOR®”  
Enables family members to monitor their elderly parents and other family members who live alone via the status of their home appliances and indoor temperatures, while protecting their privacy. Helps address some of the issues of an aging society with declining birthrates.
- AVATAR solutions for the future where everyone joins hands  
Helps to mitigate the effects of labor shortages resulting from declining birthrates and aging populations, as well as hazardous manual labor that is difficult to automate. Helps create a society in which anyone can work and act anytime and anywhere by eliminating time and location restrictions on remote operations.
- Smart factory concept utilizing AR technology  
Showcases a smart factory using augmented reality technology in an environment that allows everyone to work safely and comfortably and enjoy their work. Helps address the labor shortage in the manufacturing sector by making factories more attractive places to work.

---

<sup>3</sup> According to Mitsubishi Electric's research as of March 29, 2023

<sup>4</sup> Terahertz wave: electromagnetic waves in the frequency range between light and radio waves

Mitsubishi Electric's booth at CEATEC 2023 will be located in Exhibition Hall No.7 (block A002) in Makuhari Messe.

*Rulerless is a registered trademark of Mitsubishi Electric Information Systems Corporation.*

*MeAMOR is a registered trademark of Mitsubishi Electric Corporation.*

###

### **About Mitsubishi Electric Corporation**

With more than 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Mitsubishi Electric enriches society with technology in the spirit of its "Changes for the Better." The company recorded a revenue of 5,003.6 billion yen (U.S.\$ 37.3 billion\*) in the fiscal year ended March 31, 2023. For more information, please visit [www.MitsubishiElectric.com](http://www.MitsubishiElectric.com)

\*U.S. dollar amounts are translated from yen at the rate of ¥134=U.S.\$1, the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2023