

**MITSUBISHI ELECTRIC CORPORATION**  
**PUBLIC RELATIONS DIVISION**  
7-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, 100-8310 Japan

**FOR IMMEDIATE RELEASE**

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*Customer Inquiries*

*Media Inquiries*

Business Innovation & DX Strategy Division  
Business Innovation Group  
Mitsubishi Electric Corporation

Public Relations Division

Mitsubishi Electric Corporation

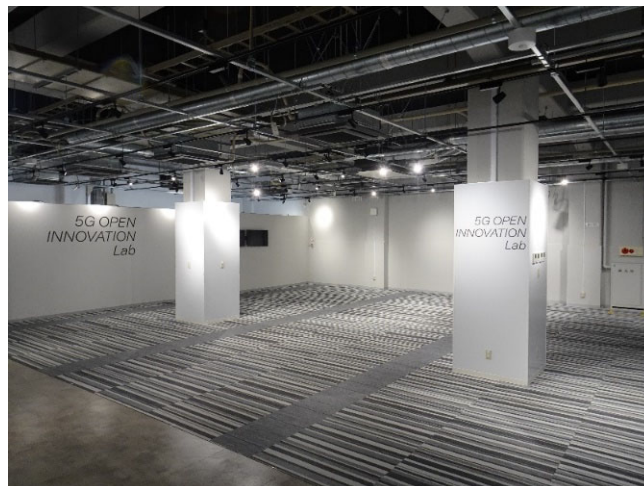
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## **Mitsubishi Electric to Establish 5G OPEN INNOVATION Lab**

*Targeting private-5G businesses and services through research and tests with customers and partners*

**TOKYO, June 28, 2021** – [Mitsubishi Electric Corporation](https://www.mitsubishielectric.com) (TOKYO: 6503) announced today that it will soon begin operating the 5G OPEN INNOVATION Lab™ to collaborate with customers and partner companies on research and test demonstrations of “local 5G” private mobile communication systems. The 132-square-meter facility, based in the company’s Information Technology R&D Center in Kamakura, Kanagawa Prefecture, will open on June 30. Mitsubishi Electric was recently licensed by the Ministry of Internal Affairs and Communications (MIC) to operate local 5G mobile communication systems designed for private use by municipalities and companies in designated areas to meet specific needs.



5G OPEN INNOVATION Lab

The lab’s 4.8GHz–4.9GHz test environment will be used to research and demonstrate solutions for specific business, etc. needs from initial stages. In particular, they will perform comparative verifications of local 5G and other wireless methods, such as Wi-Fi 6 and private LTE, to determine the best communication method for each application and purpose.

## **Background and Purpose**

The Ministry of Internal Affairs and Communications (MIC) sanctioned the private use of local 5G systems by enterprises and municipalities in December 2019, and then 4.6GHz–4.9GHz as a sub-6 GHz band for the construction of wide-area local 5G systems in December 2020. The environment in Japan is now ready for the deployment and expected growth of these private 5G systems and related solutions.

Mitsubishi Electric first launched a local 5G demonstration using millimeter-wave bands at its Nagoya Works in Nagoya, Aichi Prefecture in May 2020, and since then has been verifying the practical application of the technology for manufacturing.

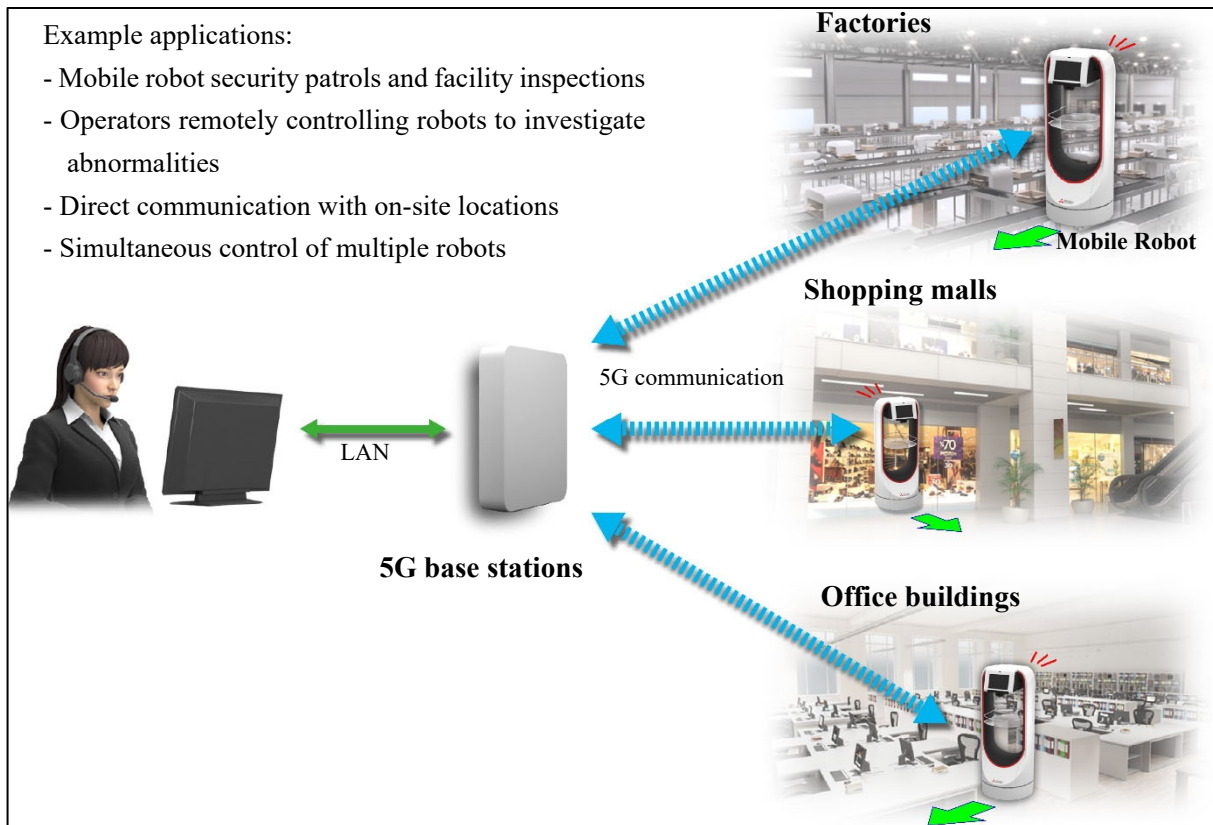
Mitsubishi Electric will now open the 5G OPEN INNOVATION Lab to collaborate with customers and partners in using the 4.8GHz–4.9GHz sub-6 frequency range to address specific private communication needs, including through the development of related new 5G businesses and services. Customers and partners will be able to perform test demonstrations of potential business solutions using their own applications as well as those of Mitsubishi Electric, including for comparison with and evaluation against Wi-Fi 6, private LTE and other wireless systems.

## **Future Aims**

Mitsubishi Electric aims to combine its own systems and equipment with local 5G systems in solutions that it will develop, build and provide on a one-stop basis. It also aims to create related new businesses and services in collaboration with customers and partners. In addition to studying various local 5G demonstrations, Mitsubishi Electric plans to conduct a wide range of test demonstrations at the lab, including the automatic and remote-control operation of mobile robots via 5G.

**Example Test Demonstration**

Local 5G systems are expected to be utilized for the high-precision control of multiple robots based on the high-speed communication of large amounts of image and video data. Test demonstrations conducted at the 5G OPEN INNOVATION Lab will, for example, measure communication speed, latency and range of mobile robots operating in practical environments.



- Example applications:
- Mobile robot security patrols and facility inspections
  - Operators remotely controlling robots to investigate abnormalities
  - Direct communication with on-site locations
  - Simultaneous control of multiple robots

**Trademark**

5G OPEN INNOVATION Lab™ is a trademark of Mitsubishi Electric Corporation.

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**About Mitsubishi Electric Corporation**

With 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 4,191.4 billion yen (U.S.\$ 37.8 billion\*) in the fiscal year ended March 31, 2021. For more information, please visit [www.MitsubishiElectric.com](http://www.MitsubishiElectric.com)

\*U.S. dollar amounts are translated from yen at the rate of ¥111=U.S.\$1, the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2021