

February 24, 2026

NTT ADVANCED TECHNOLOGY CORPORATION

Ehime CATV Co., Ltd. (Ehime CATV)

Transcelestial Technologies Pte Ltd.

First Commercial Deployment in Japan of “CENTAURI,” a Wireless Laser Communication System Powered by Physical AI
— Enhancing Network Capabilities While Preserving the Scenic Landscape at Matsuyama Castle —

Ehime CATV Co., Ltd. (Ehime CATV, Head Office: Matsuyama, Ehime Prefecture; President and Representative Director: Takashi Miyauchi) has introduced the wireless laser communication system “CENTAURI” (pronounced “sen-TOR-ee”; “CENTAURI”), sold by NTT ADVANCED TECHNOLOGY CORPORATION (NTT-AT, Head Office: Shinjuku-ku, Tokyo; Representative Director, President: Tadashi Ito), with the aim of enhancing its network environment while giving due consideration to the surrounding landscape.

This deployment is the first case in Japan in which CENTAURI is utilized as a commercial network. Following a joint proof-of-concept trial conducted by the two companies, CENTAURI has been formally adopted for commercial use.

CENTAURI is a product of Transcelestial Technologies Pte Ltd., headquartered in Singapore. NTT-AT serves as a sales partner in Japan and overseas and began sales in 2025.

1. Background

As Ehime CATV works to strengthen its Wi-Fi services and video transmission at Matsuyama Castle, it has sought to achieve both “consideration for the landscape” and “a high-quality network.” However, laying optical fiber involves many physical constraints, and microwave links can make it difficult to secure sufficient throughput and low latency. For these reasons, Ehime CATV focused on CENTAURI as a new means to realize a high-speed, low-latency wireless network environment.



Installation site: Between Matsuyama Castle and the Ehime CATV headquarters building (approx. 800 m)

2. Overview of CENTAURI

CENTAURI is a wireless communication system that can deliver fiber-class high-speed connectivity while minimizing impact on the surrounding landscape. Its key features are as follows:

- High-speed, long-distance wireless communication: The 10 Gbps model supports links up to 3 km, and the 25 Gbps model supports links up to 1 km.
- Simple installation: Equipped with an automatic optical-axis alignment function powered by Physical AI, enabling installation to be completed in a short time.
- Rapid deployment with no license required: Because a radio station license and optical-fiber construction are not required, CENTAURI can be deployed quickly while keeping initial costs down.



Appearance of CENTAURI

3. Proof-of-Concept Trial

CENTAURI was used to connect Matsuyama Castle (Baguyagura-馬具櫓 In Japanese), located on a hilltop at an elevation of about 130 meters, with the Ehime CATV headquarters building at the foot of the hill (approx. 800 m). Communication conditions were verified for about one month, from November 7 to December 17, 2025.

As a result, the unit was confirmed to be comparable in size to existing cameras and it avoids detracting from the lush green scenery around Matsuyama Castle. In addition, initial positioning and adjustment work at installation was completed within one hour thanks to the automatic optical-axis alignment function powered by Physical AI, confirming excellent workability. During the verification period, environmental changes occurred—including visibility fluctuations due to rainy weather and dense fog, and vibration due to strong winds—yet no significant impact on communication was observed, confirming that stable connectivity could be maintained.

4. Future Plans

Ehime CATV will consider expanding the use of CENTAURI not only at tourist destinations such as Shiroyama Park, but also over a wider area, including remote island regions.

NTT-AT will leverage the know-how gained through this commercial deployment of CENTAURI, which has been provided domestically since 2025, to further propose solutions across a wide range of fields. These include permanent connectivity between buildings, applications in tourist sites and around important cultural properties where scenic considerations are required, rapid restoration of communications infrastructure in the event of disasters, and temporary communication needs at event venues.

Company Profiles

■ NTT ADVANCED TECHNOLOGY CORPORATION (NTT-AT)

Since its establishment in 1976, NTT-AT has served as the technological core company of the NTT Group. By widely incorporating leading-edge technologies from around the world, including technologies from NTT laboratories, and integrating them, NTT-AT continues to solve customers' challenges and provide value. The company develops its business around four core domains: "Applications," "Materials & Nanotechnology," "Social Platforms," and "Total Solutions."

Name: NTT ADVANCED TECHNOLOGY CORPORATION

Address: Tokyo Opera City Tower, 3-20-2 Nishi-Shinjuku, Shinjuku-ku, Tokyo, Japan

Established: December 17, 1976

Capital: JPY 5.0 billion

Representative: Tadashi Ito, President and Representative Director

Business: Application Business; Materials & Nanotechnology Business; Social Platform Business; Total Solution Business

Website: <https://www.ntt-at.co.jp/>

■ Ehime CATV Co., Ltd.

Ehime CATV provides services to approximately 180,000 households in Matsuyama City, neighboring municipalities, and Ainan Town, by deploying transmission routes totaling approximately 7,100 km. In addition to locally produced community information programs, multi-channel broadcasting, high-speed internet, and fixed-line telephone services, it also offers MVNO services. By leveraging ICT (information and communication technologies), the company aims to contribute to regional development and to be a cable television station that is loved and familiar to local residents.

Name: Ehime CATV Co., Ltd.

Address: 1-11-4 Otemachi, Matsuyama, Ehime, Japan

Established: August 22, 1989

Capital: JPY 300 million

Representative: Takashi Miyauchi, President and Representative Director

Business: Cable television broadcasting business and telecommunications business

Website: <https://www.e-catv.ne.jp/>

■ Transcelestial Technologies Pte Ltd.

Transcelestial has industrialized a solution that provides high-speed networks by building wireless distribution networks that connect physical infrastructure using its proprietary wireless laser communication technology. This solution enables mobile network operators, internet service providers, and various enterprises to introduce the technology with significantly lower operating costs than conventional approaches.

Name: Transcelestial Technologies Pte Ltd.

Location: Singapore

Established: 2016

Representative: Rohit Jha (CEO)

Business: Development and sales of wireless laser communication equipment

Website: <https://transcelestial.com/>

*1 External equipment is not included. Please check the operation verification equipment separately.

* All company and product names mentioned herein are trademarks or registered trademarks of their respective companies.

* The data is current as of the date of publication. Please note that the information is subject to change without notice.

■For further information, please contact:
NTT ADVANCED TECHNOLOGY CORPORATION

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https://keytech.ntt-at.com/network/index_centauri.html

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