

株式会社 富士通ゼネラル

December 5, 2024 (No.24-N04-35)

# Fujitsu General develops its next-generation Wearable Air Conditioner that delivers extreme cooling in just 10 seconds

Fujitsu General today announced that it has developed its new-generation Wearable Air Conditioner featuring unprecedented cooling performance. Online pre-orders for this new model can be made starting today. The product is scheduled for release in spring 2025.

The new Wearable Air Conditioner is a more compact version of the Fujitsu General Cómodo gear released in 2021. Still boasting exceptional performance, capable of cooling up to 20°C below the ambient air temperature, the new model was developed as an easy-to-use, convenient neck cooler. The previously separate neck cooler and water-cooled heat exchanger are now integrated into a single tubeless design. As a result, the heat exchanger unit that wrapped around the waist no longer needs to be worn. The product can now be put on in just 10 seconds, three times faster than before. The greatly improved ease-of-use makes the new product very convenient for workers in construction, logistics, events, and other businesses in which mobility is essential.

Pre-orders: Starting today (December 5) on the official online store

"Early bird" discounts are available for pre-orders up to March 31, 2025

Pre-order page: <a href="https://rental.comodo-gear.com/pages/wearable\_aircon\_process">https://rental.comodo-gear.com/pages/wearable\_aircon\_process</a>
Recommended retail price: ¥60,000 (excl. tax) \* ¥45,000 with "early bird" discount

Release date: Spring 2025



Wearable Air Conditioner



Integrated compact model

Fujitsu General's Wearable Air Conditioner is a neck cooling device that utilizes a Peltier element. Its cooling capacity makes it possible for the neck to feel cool by as much as 20°C below the ambient air temperature when worn. Leveraging Fujitsu General's core strength in air conditioning technology and expertise, we designed the device with professional specifications. A built-in heat exchanger dissipates generated heat from the Peltier element into water. This results in consistently excellent cooling performance, even in harsh environments of over 40°C. Since its launch in 2021, the product has been adopted by over 500 companies in Japan for use in fiercely hot workplaces, in steel, plant engineering, and other industries. In a wide variety of applications, it has demonstrated its value under severe conditions.\*

In October 2024, Fujitsu General announced a new vision, "Creating a Life Conditioner." This is an expression of our commitment to creating comfort through our products and services, and protecting all life. Like this, we hope to help ensure the smiles of future children and the health of the global environment. As summer heat becomes more intense due to climate change, we will strive to help resolve social issues. We will do this by making it possible for people to work comfortably in fiercely hot environments, through the development of Wearable Air Conditioners that are easy to use on a daily basis.

\*1 This is not a medical device for preventing heat stroke. It is not an explosion-proof device.

#### **Contact Us**

#### Features of the Wearable Air Conditioner

## 1. Groundbreaking integrated design

The neck cooler and heat exchanger are integrated into a tubeless design, cutting the time it takes to put on the device from 30 to 10 seconds.

By reducing the number of parts, we also made the product approximately 50% lighter.

Consequently, the product offers improved mobility and safety during work. It is also more compact, easier to use, and more comfortable.

#### 2. Outstanding energy efficiency

The device consumes just 5 to 20 W of electricity.

Despite this remarkably low energy consumption, it makes the neck feel cool by as much as 20°C below the ambient temperature.

## 3. Cooling and heating functions enable all-year use

The product includes a heating function, for keeping warm in cold environments, thereby supporting safe, secure work environments all year round.

#### 4. Made in Japan, for peace of mind

Manufactured at the Fujitsu General Electronics plant at Ichinoseki, Iwate Prefecture

The company's manufacturing technology and production expertise are fully utilized to ensure a high-quality product.

# **Development Background**

As the average global temperature continues to rise, and parts of Japan experience temperatures higher than 39°C even in September, we are entering "the age of global boiling." Given this crisis, early action is needed to prepare for the heat of summer. For example, some summer events next year have already been rescheduled. The Ministry of Economy, Trade and Industry is also promoting early inspections of air conditioners.

In response to this situation, Fujitsu General has started accepting early pre-orders for its new Wearable Air Conditioners to support people who work in fiercely hot environments.

# Main Specifications\*2

Product name		Wearable Air Conditioner
		One size fits all
Functions		Cooling mode / Heating mode (3-step power control) Low / Medium / High
Color (neck unit)		Light gray
Max. external dimensions	Neck unit (mm)	Approx. 150 (H) × 196 (W) × 91 (D)
	Battery unit (mm)	Approx. 108 (H) × 80 (W) × 29 (D)
	Remote controller (mm)	Approx. 99 (H) × 35 (W) × 23 (D)
Weight	Neck unit (g)	Approx. 300
	Battery unit (g)	Approx. 300
	Remote controller (g)	Approx. 50
Recommended use temp. range		5 to 40°C
Rechargeable battery		External lithium ion battery
Continuous use time		Approx. 2 to 7 hours *3
Charging time		Approx. 2 to 3 hours *3
Sale price (excl. tax)		¥60,000
Sale method		Sale only (no rental)

- \*2 Since the product is still in development, specifications may change.
- \*3 Continuous use time and charging time may vary according to environment and conditions.

# **Related Links**

# Official online store

# Cómodo gear product page

#### [Trademarks]

- \* Cómodo gear is a product commercialized by Fujitsu General based on the WearCon® technology developed by Kiyoshi Itao (Professor Emeritus of The University of Tokyo).
- \* "WearCon" is a registered trademark of WIN Human Recorder Co., Ltd.
- \* "Cómodo gear" and **& Cómodo gear** are registered trademarks of Fujitsu General.