

San Ace Products

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The use of generative AI such as ChatGPT has quickly become widespread through society and many companies are looking to adopt similar services. Such generative AI technologies are expected to advance fast, raising demand for more and more data centers to compute vast resources of information.

Although the COVID-19 infections have come to a halt and many businesses are returning to in-person operations, the efficient network-based business practices introduced during the pandemic—

including telework, online meetings, and online training—have taken root.

As such, servers, routers, and storage devices that support such generative AI systems and information networks are required to perform better in speed, capacity, and reliability. Furthermore, today's equipment as a whole is becoming denser and generating more heat, demanding cooling fans with superior performance in airflow, static pressure, power consumption, and reliability.

In addition, with the Sustainable Development Goals (SDGs) becoming

a global agenda, it is vital to develop products that consume less energy and last longer for carbon neutrality.

Against such a backdrop, we developed and launched cooling fans with industry-leading performance and reliability that can meet the market demand.

Below are overviews of the products we developed in 2023.

Note: The company names and product names listed in this article are the trademarks or registered trademarks of their respective owners.

■ Long Life Fan

DC Fan

• 40 × 40 × 28 mm *San Ace 40L 9LG* type

Our 40 × 40 × 28 mm Long Life Fans, primarily used in high-end servers and ICT equipment, are often installed in remote locations and therefore require high reliability and long expected life. Moreover, as equipment performance increases in general, our existing Long Life Fans are also required to provide higher cooling performance and lower

power consumption than ever before.

In response to these needs, we developed and launched the *San Ace 40L 9LG* type Long Life Fan, which is designed for low power consumption while maintaining the same long life as our current model and offering the industry's highest⁽¹⁾ airflow and static pressure.

(1) Based on our own research as of May 25, 2023, conducted among axial DC fans of equivalent size and cooling performance on the market.



■ 120 × 120 × 25 mm ACDC Fan

- 120 × 120 × 25 mm *San Ace 120AD* 9AD type

For AC fans, there is increasing demand for PWM control to adjust fan speed based on the operating conditions of equipment, as well as for wide input voltage ranges to support use in various countries. To meet these requirements, we have expanded our lineup of ACDC fans, which have a built-in AC-DC conversion circuit to drive a DC motor.

Furthermore, today's control panels

and industrial equipment are more compact and have less internal space, demanding thinner-profile cooling fans, including ACDC fans.

In response to such market demand, we developed and launched the *San Ace 120AD* 9AD type fan, which features a thickness of 25 mm, making it our slimmest ACDC fan, as well as the industry's highest⁽²⁾ static pressure and airflow.



(2) Based on our own research as of June 26, 2023, conducted among ACDC fans of equivalent size on the market.

■ Low Noise Fan

DC Fan

- 92 × 92 × 38 mm *San Ace 92* 9RA type

Our 92 × 92 × 38 mm fans are often used in workstations, medical equipment, and servers. In consideration of environmental friendliness, demand for lower noise and lower power consumption is increasing for these applications as well.

To meet such market demand, we developed and launched the *San Ace 92* 9RA type fan, which has achieved both high performance and the industry's lowest⁽³⁾ noise at the same time. It will be introduced in detail in a separate article in this issue.



(3) Based on our own research as of November 13, 2023, conducted among equally-sized axial DC fans on the market.

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