

San Ace Products

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AI technologies like generative AI and autonomous driving systems have been adopted by a wide range of industries. These AI-powered systems rely on GPU servers in data centers to process large volumes of data.

As remote work has become a new norm in recent years, cloud services are increasingly accessed from a network environment using a laptop or smartphone. Accordingly, communication equipment that supports cloud services, such as servers, storage devices, and

routers, is advancing in speed and capacity.

As data centers and ICT equipment are becoming denser, they are generating more heat. To mitigate heat generation and reduce maintenance frequency, fans for cooling such equipment are required to provide higher cooling performance, reliability, and energy efficiency.

In addition, cooling fans with environmental durability are increasingly required for use in renewable energy systems installed outdoors, such as PV energy storage

systems and rapid EV charging stations.

In this way, cooling fans are required to support a wide range of specifications, which requires constant, innovative advancement. To meet these market needs in a timely manner, we will remain committed to developing products that support people's lives.

Below are overviews of the products we developed in 2024.

■ Long Life Fan

DC Fan

• 60 × 60 × 76 mm *San Ace 60L 9CRLB* type

Our 60 × 60 × 76 mm Long Life Counter Rotating Fans are used in equipment that requires high reliability and long service life, such as high-end communication equipment and servers.

As equipment performance increases, Long Life Fans are 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 60L 9CRLB* type Long Life Fan, which offers 100,000 hours of continuous operation and delivers the industry's highest⁽¹⁾ airflow and static pressure, all while maintaining the size of our current product.



(1) Based on our own research as of March 28, 2024, conducted among equally sized axial DC fans on the market.

• 60 × 60 × 56 mm *San Ace 60 9CRH* type Counter Rotating Fan

Our 60 × 60 × 56 mm Counter Rotating Fans are widely used for cooling servers and communication equipment.

As equipment performance increases, some customers find the current product obsolete and have demanded

a new Counter Rotating Fan with even higher cooling performance. In response to such market demands, we developed and launched the *San Ace 60 9CRH* type fan that features the industry's highest⁽²⁾ airflow and static pressure.

(2) Based on our own research as of June 12, 2024, conducted among equally sized axial DC fans on the market.



• 80 × 80 × 80 mm *San Ace 80 9CRH* type Counter Rotating Fan

Our 80 × 80 × 80 mm Counter Rotating Fans are mainly used in equipment requiring high cooling performance, such as high-performance communication equipment and GPU servers essential for generative AI.

As the performance of such equipment continues to increase, so does the

demand for cooling capabilities beyond those of existing products.

In response to such market demands, we developed and launched the *San Ace 80 9CRH* type fan that features the industry's highest⁽³⁾ airflow and static pressure.

(3) Based on our own research as of July 16, 2024, conducted among equally sized axial DC fans on the market.



• 38 × 38 × 28 mm *San Ace 38 9HVA* type fan

Our 38 × 38 × 28 mm fans are widely used primarily in high-density equipment such as 1U servers, switching power supplies, and communication equipment. Equipment of this size is in high demand and actively being developed.

As the performance of equipment is expected to advance further, higher cooling performance will be required

of fans, beyond the reach of existing products.

In response to such market demands, we developed and launched the *San Ace 38 9HVA* type fan that features the industry's highest⁽⁴⁾ airflow and static pressure.

It will be introduced in detail in a separate article in this issue.

(4) Based on our own research as of October 3, 2024, conducted among equally sized axial DC fans on the market.



■ Splash Proof Fan

DC Fan

- 120 × 120 × 25 mm *San Ace 120W* 9WPA type Splash Proof Fan

Our 120 × 120 × 25 mm Splash Proof Fans are extensively used in equipment that requires high water and dust protection, such as EV chargers, storage batteries, PV inverters, digital signage, and plant factories.

These types of equipment often require a compact size, low power consumption, and low noise.

In response to such market demand, we developed and launched the *San Ace 120W* 9WPA type Splash Proof Fan, which delivers the industry's highest⁽⁵⁾ static pressure and airflow despite its slim form factor with a **25 mm** thickness.

It will be introduced in detail in a separate article in this issue.



(5) Based on our own research as of January 9, 2025, conducted among equally sized axial DC fans on the market.

Author

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