

Cooling Systems Division

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Cooling fans used to cool telecommunication equipment, information-processing equipment, power sources and other electrical equipment are in great demand. They demand high air flow, high static pressure and low sound pressure level fans that consume minimal energy. Additionally, customers' products have been getting smaller, meaning that cooling fans must

also compact without lowering their performance. Increased reliability and environmental applicability have also been important factors in the market since there is a growing demand for special applications and usages to be supported.

Sanyo Denki must follow these market trends and the needs of our customers, continuing to develop products and technologies to meet

the demands of the marketplace. We aim to provide our customers with products that offer not only greater ease of use, but also greater reliability for high performance products.

The following sections introduce the main technical developments for the Cooling Systems Division in 2008.

■ “San Ace 60” GV Type

DC Fan

We have developed a 60 mm sq. × 38 mm thick fan with industry leading performance.

Compared to our conventional products, this fan has up to 17% more air flow, up to 42% more static pressure and uses 18% less power at the same fan volume. An optional

“PWM control function” that controls speed externally can also be added.

Applications: Servers, storage systems, telecommunication equipment, and various types of industrial equipment



■ “San Ace 80” GV Type

DC Fan

We have developed an 80 mm sq. × 25 mm thick fan with industry leading performance.

Compared to our conventional products, this fan has up to 40% more air flow, up to 115% more static pressure and uses 16% less power at the same fan volume. An optional

“PWM control function” that controls speed externally can also be added.

Applications: Servers, storage systems, telecommunication equipment, and various types of industrial equipment



■ “San Ace 120” GV Type

DC Fan

We have developed a 120 mm sq. × 25 mm thick fan with industry leading performance.

Compared to our conventional products, this fan has up to 31% more air flow, up to 87% more static pressure and uses 12% less power at the same fan volume. An optional

“PWM control function” that controls speed externally can also be added.

Applications: Servers, storage systems, telecommunication equipment, and various types of industrial equipment



■ “San Ace 38” CRA Type

DC Fan

We have developed the industry’s first 38 mm sq. × 48 mm thick counter-rotating fan.

This fan does not require modifications to the chassis of the customers’ products, as it is the size of a 1U server power unit, yet provides high air flow and static pressure. With a maximum airflow of 0.77 m³/min and a maximum static pressure of 700 Pa,

this fan offers a 25% improvement in static pressure over our conventional, larger model (40 mm sq. × 48 mm thick counter-rotating fan). An optional “PWM control function” that controls speed externally can also be added.

Application: Servers and power supplies.



■ “San Ace 60” CR Type

DC Fan

We have developed a 60 mm sq. × 51 mm thick counter-rotating fan with industry leading performance.

Power consumption is reduced 29% at the same air flow compared to our conventional, larger model (60 mm sq. × 76 mm thick counter-rotating fan) which had the same air flow and static

pressure characteristics. An optional “PWM control function” that controls speed externally can also be added.

Applications: Servers, storage systems, power supplies, and various types of industrial equipment



■ “San Ace 80” WF Type

DC Fan

We have developed an 80 mm sq. × 25 mm thick, oil resistant fan for use in harsh environments such as oil misting.

This fan offers a maximum air flow of 1.20 m³/min, a maximum static pressure of 58.0 Pa and a sound pressure level of 38 dB (A). This brings our oil-resistant fan lineup to 5 offerings, including 40 mm sq. × 20 mm

thick fan; 60 mm sq. × 15 mm thick fan; 60 mm sq. × 25 mm thick fan; 80 mm sq. × 25 mm thick fan and 120 mm sq. × 38 mm thick fan.

Applications: Robotic control boards, inverters, NC lathes, and various types of manufacturing tools



Yoshihiko Aizawa

Joined Sanyo Denki in 1989.
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Worked on the development and design of cooling fans.