Power Systems Division

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In 2005, the Power Systems Division developed the following products.

We developed a small capacity power supply, the "SANUPS E11A," that uses new method called the 3-mode method (power supply quality priority mode, efficiency priority mode, and active filter mode).

In mid-capacity power supplies, we developed the "SANUPS E23A-Li" uninterruptible power supply (henceforth referred to as "UPS"), which uses a lithium battery and can provide backup power in case of instantaneous voltage drop or momentary power breaks, all while offering longer life and lower weight.

■ Development of the Hybrid "SANUPS E11A" UPS

The reliability and maintenance of stable operation for the servers and routers that comprise a network system is becoming more and more important. Consequently, there is an increasing demand for better performance and higher reliability in the UPS units that power these devices. Further, from an environmental standpoint, more efficient products that keep power consumption to minimum are also desirable.

With these demands in mind, we developed the "SANUPS E11A" to be a stable power source with improved maintainability and minimal power consumption when the power supply is stable.

The "SANUPS E11A" uses a new method called the 3-mode method. The three modes available are power supply quality priority mode, efficiency priority mode, and active filter mode. The UPS automatically selects the best mode based on the power supply and the load power.

Power supply quality priority mode is selected when the power source is poor and it provides high quality power to the load. Efficiency priority mode is selected when the power source is good and it operates at 95% energy conversion efficiency, keeping power consumption low.

Active filter mode is selected when the load power factor is poor and it subdues the higher harmonics generated by the load while improving the input phase factor.

■ Development of the "SANUPS E23A-Li" Lithium Ion Battery Mid-capacity UPS

The UPS units that provide power to all types of information technology and communications devices, especially computers, are designed to provide power under any circumstances and thus must be extremely reliable. Additionally, environmental concerns mandate minimal power consumption and minimal use of toxic substances.

The small, lightweight, environmentally friendly lithium battery "SANUPS E23A-Li" UPS was designed to provide backup against anything from instantaneous voltage drop to momentary power breaks.

The small, lightweight, environmentally friendly "SANUPS E23A-Li" UPS uses a lithium battery in place of the lead battery used in the "SANUPS E23A," which itself uses parallel processing to offer a high overload capacity.

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