

Power Systems Division

Tetsuo Sezai

In 2004, the major products developed by Sanyo Denki's Power Systems Division are as follows:

- Power conditioners for public- and industrial-use photovoltaic systems the stationary "SANUPS P73E" that can

manage multiple options, and the "SANUPS P83A" that offers an output capacity of 100kW.

- The small-capacity "SANUPS A11F" Series UPS with a constant inverter power supply method that incorporates

automatic battery checking and coordinated operation functions.

An outline of the features of each of these new products is given below.

■ Development of "SANUPS P73E" Power Conditioner for Photovoltaic Systems

Recently, standardization has become the new byword in photovoltaic systems for public and industrial applications. Sanyo Denki has contributed to the standardization of power conditioners through its development last year of the "SANUPS P73D" a wall-mounted power conditioner, available exclusively with a coordinated system drive function.

However, many users have requested stationary equipment and various options for this system; in response to these requests, we are proud to announce the development of a

stationary "SANUPS P73E" with multiple options.

The "SANUPS P73E" has a stationary, vertical configuration compatible with outputs between 10kW and 60kW, with 10kW units stacked on the input-output box. Supplementary power sources and various transducer can be housed in the input-output box as options. In addition, the 10kW unit offers JET certification, which enables users to simplify their power consultations. These units also accommodate a wide range of additional user requirements.



■ Development of "SANUPS P83A" Power Conditioner for Photovoltaic Systems

Our conventional "SANUPS PMC-TD" is comprised of single power conditioners with output capacities between 10kW and 50kW. In contrast, the newly developed "SANUPS P83A" offers 100kW of output capacity in a single unit, in addition to basic power conditioner functionality such as a power transformer, coordinated system drive protection, display and operation functions.

An insulated transformer is used in the power converter section to ensure safety and

prevent an outflow of the direct current voltage component from photovoltaic cells to commercial power sources.

This device is also more compact and efficient than conventional systems since it is dedicated to the coordinated system drive mode, which typically accounts for a large percentage of photovoltaic systems. Because a single "SANUPS P83A" unit outputs at 100kW, it is well suited for incorporation into large-scale photovoltaic systems.



■ Development of Small Capacity UPS "SANUPS A11F"

The "SANUPS A11F" was developed as a constant inverter power supply UPS for servers, routers and other network system devices.

This product utilizes the same technology developed for the SANUPS ASE Series, and has achieved efficiency rates as high as 91% (at 3kVA), allowing savings in operating costs.

A host of new functions have been added, such as an automatic battery check function

to prevent system failure due to battery deterioration during power failures, and a sequential operation function that enables sequential activation and termination procedures.

The "SANUPS A11F" is available in 2kVA and 3kVA capacities. Its size has been reduced by about 10 to 25%, and its mass has been reduced by about 10 to 30% compared to conventional products.



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Joined Sanyo Denki in 1984.

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