News Release
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GS Yuasa Corporation

GS Yuasa Introduces Wall-mounted 10 kVA Power Conditioner Three-phase LINE BACK αIV - Strong and reliable power conditioner realizes high efficiency, eliminates cooling fan and is resistant to salt damage-

GS Yuasa Corporation (Tokyo Stock Exchange: 6674) announced that it introduced a wall-mounted 10 kVA power conditioner Three-phase LINE BACK αIV (format: LBSJ-10-T3C) in October that is best suited for medium-sized photovoltaic power generation facilities.

Three-phase LINE BACK αIV was developed as a power conditioner that addresses customers' various needs such as high conversion efficiency and strong durability. It uses full SiC-FET*1 for the main circuit conversion element and achieved conversion efficiency of 96.5%, with a maximum conversion efficiency of 98.0%, which is the best in the industry. It adopted a body cooling technology that uses aluminum die-casting*2 for the casing, which eliminated the need for a cooling fan, enabling the product to be installed in areas where it could be susceptible to damages caused by salt. Further, the product also has an in-built independent operation output circuit that effectively utilizes the power generated by solar cell even during power outage.

GS Yuasa has been manufacturing and marketing power conditioners for photovoltaic power generation since 1993 and currently has a wide product lineup ranging from 4.5 kW to 250 kW. The company will continue to contribute to the expansion of renewable energy through manufacture and sales of high-quality power conditioners for power system interconnection.

*1 Compound semiconductor material composed of silicon (Si) and carbon (C), and a switching device with limited loss.
*2 A casting method in which melted aluminum alloy is poured into a mold and cast under high pressure.

[Features]

1. **Adopted full SiC-FET for the main circuit conversion element**
   It achieved conversion efficiency of 96.5% and maximum conversion efficiency of 98.0%.

2. **Eliminated the cooling fan**
   It eliminated the cooling fan by adopting a body cooling technology which uses aluminum die-casting for the body. It also contributed to reduction of running cost. The instrument can be installed even in areas with a concern for damages caused by salt.

3. **Corresponds to protection level IP56*3 regarding protection against dust and water**
   The product can be installed in various environment such as on solar cell rack.

4. **In-built independent operation output circuit of single-phase two wire 100V 1.5kVA**
   It can supply electric power, generated by solar cell, at a specific load during power outage.

5. **Achieved superior silent performance**
   It achieved 51.2dB by eliminating the cooling fan and by setting the switching frequency above the human audible frequency.

6. **Controllable output power*4**
   Its output power can be controlled by installing a dedicated network card (sold separately; launch scheduled for January 2017).

*3 It is a standard that indicates classifications of protection against dust and water and denotes protection from dust as well as the level till which no harmful effect from strong direct jet of water from any direction.
*4 There is a likelihood of electric power supply imbalance occurring because of increases in power generation from renewable energy, and this is a system for electric power companies to control the output from power generation facilities to maintain supply demand balance.

[Price]
Standard retail price (excluding tax) ¥1,100,000

[Sales Target]
1,500 units per year

[Image]