

## News Release

October 26th, 2011

GS Yuasa Corporation



### **Improvements on a Small Wall-Mounted 10kW Power Conditioner for General Purpose Photovoltaic Generation Commencement of Sales for the Three-Phase Line Back $\alpha$ III**

In October 2011, GS Yuasa Corporation (Tokyo Stock Exchange: 6674, "GS Yuasa") commenced sales of the Three-Phase Line Back  $\alpha$  III, a small wall-mounted power conditioner for general purpose photovoltaic generation. GS Yuasa aims to sell 3,000 units per year based on an open price.

GS Yuasa commenced sales of power conditioners for photovoltaic generation in 1993, and currently handles a wide variety of these products from 4.5kW to 250kW power conditioners, focusing on power conditioners for industrial use. The product that has been improved is a three phase output specification product of the 10kW Line Back  $\alpha$  III Series. Over the past five years sales of over 10,000 units of this series have been achieved, supplying mainly to schools, hospitals, and business establishments such as factories.

There are hopes that photovoltaic generation will prove to be an effective means for supplementing energy deficiencies during the day, and in addition to large-scale 'mega' solar power generation systems, the market is also expected to increase dramatically for medium and small-scale industrial use that is supported by the Line Back  $\alpha$  Series. In response to these needs, GS Yuasa has utilized its past experience and know-how to make improvements to both the performance and installation environment of the Line Back  $\alpha$  series, commencing sales of its new Three-Phase Line Back  $\alpha$  III.

## Main improvements

	Features	Original product (Three Phase Line Back α Plus)	New improved product (Three Phase Line Back α III)	Advantages
1	Smaller size achieved	Width: 590 mm Depth: 285 mm Height: 550 mm <b>Volume: 92.5 L</b>	Width: 590 mm Depth: 275 mm Height: 550 mm <b>Volume: 89.2 L</b>	3.6% reduction in size
2	Weight reduction	Mass: 50 kg	Mass: 48kg	4% reduction in weight
3	Enhanced waterproof performance	Rust-resistant stainless steel is used for the outer casing	Rust-resistant stainless steel is used for the outer casing International Protection Code acquired (*IP35)	Optimal for installation outdoors, particularly solar cell panel mounting
4	Product made more efficient	Conversion efficiency: 92.5%	Conversion efficiency: 94.5%	2% improvement (JIS C8961 rated input/output operating time)
5	Expansion of DC input voltage range	0V to 500V	0V to 600V	Diversification of solar cell module arrangement patterns
6	Expansion of conforming standards	Japan Electrical Safety & Environment Technology Laboratories Certification	Japan Electrical Safety & Environment Technology Laboratories Certification  Standard Specifications for Public Works Construction from the Minister's Secretariat Building and Repairs Department of the Ministry of Land, Infrastructure and Transport (2010 version)	Expansion of conforming standards
7	Reduction of high-frequency tones		Measures taken	Expansion of possible installment locations

\*IP35: This is a standard from the International Electrotechnical Commission (IEC) that grades resistance to the intrusion of foreign solid objects and infiltration by water. Certification indicates that no damage will be caused from the intrusion of wires or foreign objects over 2.5 mm in diameter or through intrusion of water from any direction.

Image  
Three-Phase Line Back α III

