News Release
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GS Yuasa Corporation

GS Yuasa Introduces TRUSTAR-LIM Direct Current Power Supply System Installed with Industrial-use Lithium-ion Batteries

GS Yuasa Corporation (Tokyo Stock Exchange: 6674; "GS Yuasa") announced that it has introduced TRUSTAR-LIM, a direct current power supply system installed with DC100V industrial-use lithium-ion batteries.

A direct current power supply system supplies direct current power and its storage batteries supply electric power during power outage. It is often used to back up important equipment such as emergency lighting.

GS Yuasa's conventional direct current power supply system TRUSTAR series is installed with lead-acid and alkaline storage batteries and has sold more than 20,000 units since its introduction in 2005. The company newly added the TRUSTAR-LIM, installed with industrial-use lithium-ion batteries, to the lineup to flexibly respond to customer demands.

Like the versions installed with lead-acid and alkaline storage batteries, TRUSTAR-LIM is a product certified by the Fire Service Act[*1] and can be used as a backup power source for fire-fighting equipment[*2].

GS Yuasa will continue to contribute to the realization of a safe and secure society by enhancing the lineup of direct current power supply systems and alternating current uninterruptable power supply systems, which protect important equipment from power outage and disasters.

[Features]

1. Reduced size and weight

Space saving and weight reduction are achieved with the use of the high energy industrial-use lithium-ion batteries

2. Voltage management of each storage battery cell

Enables voltage management of each lithium-ion battery cell stipulated by the Fire Service Act

3. High reliability

Adoption of the thyristor method[*3] control system, which has a proven track record, to realize high reliability

*1 Equipment that has passed the screening and certification tests of the Japan Electric Association (JEA) Storage Battery Facility Accreditation Committee and conforms to the storage battery facility standards (1973 Fire and Disaster Management Agency notification No. 2).

*2 Equipment such as emergency lighting and emergency radio system that are used in firefighting and facilities required for fighting fires.

*3 A system to control voltage by converting AC voltage into DC voltage by rectifying the AC input voltage by controlling the ON/OFF time of the thyristor.

[Requirement table]

Item		Standard specifications											Remarks
Rated output current (A)		10	20	30	50	75	100	150	200	300	400	500	
Usage environment	Operating temperature (℃)	-10 to 40											
	Installation environment	Indoor, with limited harmful gas, salt and dust											
AC input	Phase	3 phases, 3 lines											
	Voltage (V)	200 or 400±10%											
	Rated input capacity (kVA approx.)	2.1	4.1	6.0	9.1	14	18	27	35	52	69	86	Input capacity at rated output
Rated value	Cooling system	Natural cooling									Forced air cooling		
DC power	Float-charging voltage (V)	114.8 (4.1V X 28 cells)											
	Output voltage accuracy [floating]	±1.0%											Rated input voltage value of ±10%, output current of 0 to 100%
	Maximum drop currency	120% or less of the rated current											
Other	Efficiency (% or more)	80	80	82	85	85	88	88	90	90	90	90	

[Images]

1. Appearance of the direct current power supply system TRUSTAR-LIM