News Release
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GS Yuasa Corporation

GS Yuasa Launches LIM50EL Series of Industrial Lithium-ion Battery Modules

GS Yuasa Corporation (Tokyo Stock Exchange: 6674; “GS Yuasa”) today announced the launch of its LIM50EL series of industrial lithium-ion battery modules.

The battery modules in the LIM50EL series are compatible with those in the existing LIM50EN series, but have significantly longer life spans due to progress with optimization of materials.

With regard to life performance, compared with existing products, GS Yuasa has succeeded in reducing capacity degradation by approximately 50% during cycle use*1 and more than 50% during float use*2 for backup power applications etc. This makes it possible to use the new battery modules for long periods of time even for applications with frequent charge/discharge cycles or in relatively high-temperature environments.

As is the case with the existing products, the new battery modules are equipped with external communications functions, and these are compatible with existing GS Yuasa storage battery monitoring systems.

While retaining the functional features of the existing products, the LIM50EL series offers upwardly compatible battery modules that combine high output performance, even longer life spans, high durability, and high environmental performance. In addition to contributing to increased use of electric-powered machinery and vehicles and enhancement of the disaster preparedness of all manner of infrastructural facilities, the new series of battery modules will also play an active role in VPP*3 systems and other facets of the electricity grid-balancing market.

GS Yuasa will continue to strive to achieve innovation in the storage battery field, the company’s core area of technological expertise. The company will also continue to leverage its extensive track record and technological capabilities as a leader in the storage batteries industry to contribute to conservation of the global environment.

*1 Cycle use refers to the operation of storage batteries that are repeatedly charged and discharged, such as those used to power automated guided vehicles.

*2 Float use refers to the operation of storage batteries that are kept charged at all times and only used in contingency situations, such as batteries used as backup power sources in the event of power outages.

*3 VPPs (Virtual Power Plants) are next-generation power networks based on dispersed power sources (such as small-scale power generation facilities and storage batteries) that help to match the supply of power to demand.

[Features]

1. Long life (at 25°C)

Cycle life: 11,000 charge/discharge cycles

Float life: 15 years (capacity retention rate of 90% or more after 15 years on standby fully charged)

2. High capacity/high output

Capacity: 48.5Ah (0.2C)

Maximum charging current: 125A (2.5C)

Maximum discharge current: 300A (6C)

3. Outstanding durability performance

Operating temperature limits: Charging *4 -20 to 45°C, discharging -20 to 45°C

Applicable Japanese Industrial Standard: JIS-E4031 (specifications relating to vibration resistance)

[Product profile]

Module product name	LIM50EL-8	LIM50EL-12
Number of cells	8	12
Rated capacity (Ah)	48.5	
Nominal voltage (V)	30.4	45.6
Maximum charging/discharging currents (A)	Charging: 125 (2.5C), discharging: 300 (6C)	
Operating temperature limits (°C)	Charging*4: -20 to 45, discharging:-20 to 45	
Mass (kg)	18.0	27.0
External dimensions (mm)	W219×L434.5×H128	W219×L617×H128

*4 Charging current needs to be controlled depending on the module temperature.