News Release Nov 24, 2015 GS Yuasa Corporation



# GS Yuasa Receives Order for a Regenerative Power Storage System with an Output of 2,000kW from Tokyo Tama Intercity Monorail

GS Yuasa Corporation (Tokyo Stock Exchange: 6674; "GS Yuasa") has received an order for the E<sup>3</sup> Solution System as a regenerative power storage system with an output of 2,000kW from Tokyo Tama Intercity Monorail Co., Ltd. ("Tokyo Tama Intercity Monorail"). The system will be installed at Tokyo Tama Intercity Monorail's Hino Transformer Station, and operations are scheduled to commence in June 2016.

The E<sup>3</sup> Solution System regenerative power storage system that was ordered is equipped with two types of storage batteries: the LIM25H-8 regenerative absorption lithium-ion battery with high input or output, and the LIM50EN-12 emergency running lithium-ion battery with large capacity. Energy savings are achieved as the regenerated power generated through train braking is stored in the regenerative absorption lithium-ion battery and released as power at the time of train acceleration in order to recycle power. In addition, power is provided by an emergency running lithium-ion battery in order to safely evacuate trains to the nearest station if stopped between stations when transformer stations have power failures and contribute to safe rail transportation.

GS Yuasa's lithium-ion batteries can support a broad range of applications including large capacity and high input or output. The batteries have been widely adopted for regenerative power storage systems, large-scale power storage system, and industrial uses such as hybrid cranes and AGV (automatic guided vehicles), as well as various fields including special applications such as rockets and artificial satellites. Going forward, GS Yuasa Group will continue to contribute to disaster countermeasures and an energy-saving society through the spread of systems using storage batteries.

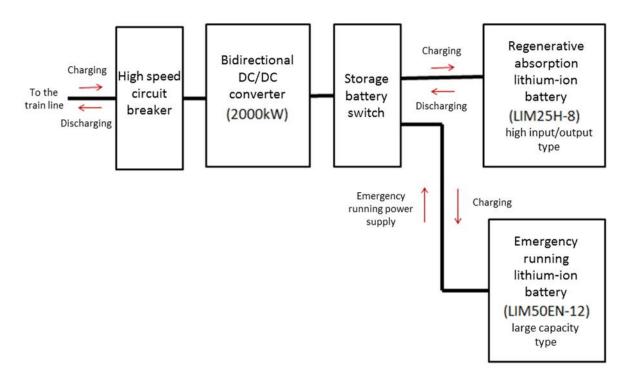
### [Overview]

## 1. System capacity

Item	Rated capacity	Remarks
Bidirectional DC/DC converter*	2000kW	1000kW converter × 2 units
Regenerative absorption	74.88kWh	LIM25H-8: 26 units connected in
lithium-ion battery		series/4 units connected in
		parallel
Emergency running lithium-ion	202.46kWh	LIM50EN-12: 16 units connected
battery		in series/6 units connected in
		parallel

<sup>\*</sup>The Bidirectional DC/DC converter is a product from Toyo Denki Seizo K.K.

### 2. System structure diagram



## [Images]

LIM25H-8 regenerative absorption lithium-ion battery

LIM50EN-12 emergency running lithium-ion battery



