



**H-IIB F5 rocket and H-II Transfer Vehicle “KOUNOTORI 5”
Equipped with High-performance Lithium-ion Batteries from
GS Yuasa Technology Ltd.**

GS Yuasa Corporation (Tokyo Stock Exchange: 6674; “GS Yuasa”) announced that high-performance lithium-ion batteries manufactured by group company GS Yuasa Technology Ltd. were installed in the H-IIB Rocket No.5 (“H-IIB F5”) launched by Mitsubishi Heavy Industries, Ltd. (Tokyo Stock Exchange: 7011) and Japan Aerospace Exploration Agency (“JAXA”) on August 19, 2015 from Tanegashima Space Center, as well as in the H-II Transfer Vehicle “KOUNOTORI 5” (“HTV,” a cargo transfer vehicle to the International Space Station) which carried onboard the rocket.

The H-IIB rocket batteries supply power to equipment including the rocket control equipment, and the batteries installed in HTV work to supply power*1 when the sun is in the Earth’s shadow. After the KOUNOTORI 5 is put on its trajectory by the H-IIB rocket, it approaches the International Space Station (ISS) and stops at the prescribed position. After that, the robotic arm of the ISS grabs the KOUNOTORI 5 and connects it with the ISS.

In recognition of the high performance of GS Yuasa’s lithium-ion batteries even in the extreme environmental conditions of space and the high reliability of this technology, they have been used for the transfer vehicles that carried cargo to the International Space Station since the HTV-1 (the first model) by Mitsubishi Electric Corporation (Tokyo Stock Exchange: 6503) that has responsible for the HTV electricity module.

GS Yuasa develops, manufactures, and sells special purpose batteries and power supply systems in order to offer high performance, high quality batteries for special environmental fields ranging from sea, land, and air (from 6,500 meters below the sea to 36,000 kilometers above ground in outer space).

We will continually contribute to space development projects through the development and manufacturing of high performance lithium-ion batteries going forward.

*1. When the KOUNOTORI is flying solo during periods of time without sunlight, lithium-ion batteries provide the power required for the operation of each system.

[Specifications of the lithium-ion batteries KOUNOTORI is equipped with]

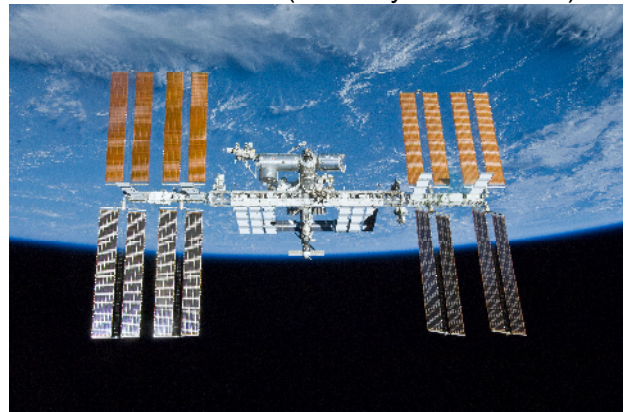
	LMG100	LMG200
Nominal voltage (V)	3.7	3.7
Capacity (Ah)	100	200
External dimensions (W×D×H)	130 × 50 × 216 (mm)	165 × 50 × 271 (mm)
Mass (g)	2,800	4,550

[Images]

1. H-IIB Rocket No.5 (Courtesy: JAXA)



2. International Space Station (Courtesy: JAXA/NASA)



3. H-II Transfer Vehicle "KOUNOTORI 5" (Courtesy: JAXA/NASA)



4. Lithium-ion battery for H-IIB rocket



5. LMG100 installed in the KOUNOTORI (Certified by Mitsubishi Electric Corporation)

