



**GS Yuasa Technology Enhances Lineup of High-performance
Lithium-ion Batteries for Use in Space**
- A wide range of capacities from 42Ah to 190Ah now available -

GS Yuasa Corporation (Tokyo Stock Exchange: 6674; "GS Yuasa") announced that its group company GS Yuasa Technology Ltd. ("GYT") has newly developed four high-performance lithium-ion batteries for use in space - JMG042 (capacity of 42Ah), JMG055 (55Ah), JMG110 (110Ah) and JMG190 (190Ah). This gives a wide range of capacity lineup ranging from 42Ah to 190Ah to JMG150 (150Ah), which was registered as a JAXA component^{*1} in 2013.

GYT's space use lithium-ion batteries have been recognized for their high capacity and outstanding performance and has been adopted for a number of spacecraft such as artificial satellites and space station transfer vehicles.

The longevity of the high-performance space use lithium-ion batteries GYT developed for the Japan Aerospace Exploration Agency ("JAXA") has significantly improved compared with the standard batteries (JMG050 and JMG100) and they are expected to be used in artificial satellites to be developed in the future.

GYT develops, manufactures and distributes batteries and power sources for special applications and has been supplying high-performance, high-quality batteries for special environments of sea, land and air (from depths of 6,500 meters below the ocean surface to 36,000 kilometers high in space).

The GS Yuasa Group will continue to contribute to space development projects through the development and manufacturing of high performance lithium-ion batteries going forward.

^{*1} JAXA component refers to the system where JAXA's Research and Development Directorate develops the installed components and devices for common use in its artificial satellites, and registers and discloses them in JAXA's database.

<http://www.ard.jaxa.jp/database/db-compindex.html>

[Profile of the lineup of the high-performance space use lithium-ion batteries]

Item	Specifications				
Component code	JMG042	JMG055	JMG110	JMG150	JMG190
Rated capacity (Ah)	42	55	110	150	190
Size (mm) ^{*2} (W×D×H)	98 x 37 x 159	130 x 50 x 131	130 x 50 x 216	130 x 50 x 271	165 x 50 x 271
Mass (kg)	1.1	1.53	2.77	3.55	4.59
Cell shape	Elliptical cylinder				
Longevity	Low orbit: 7 years, geostationary orbit: 20 years				

^{*2} Height (H) includes electrode (excluding stud bolts).

[Image] Lineup of GYT's high-performance space use lithium-ion batteries
From left, front row, JMG042 and JMG055. From left, second row, JMG110, JMG150 and JMG190

