

New battery module with higher energy density suitable for smart grids

# Industrial Lithium-ion Battery Module LIM50E

## Features

### High energy density

The volume energy density is 50% higher than our previous products, while the mass energy density is 30% higher.

### Constant monitoring of battery conditions

The standard battery monitoring system constantly monitors overall cell voltage and module temperature.

### Excellent cost performance

The battery structure suitable for mass-production enables further cost reduction and provides excellent cost performance to customers in various industries.

## Overview

(Technical principles, actions, etc.)

Lithium-ion batteries are already in use in various industries and demand is expected to increase in new fields such as smart grids and electricity storage systems. GS Yuasa has developed the LIM50E high energy density battery module as a battery suitable for these new energy fields. We used the many years of expertise that we have cultivated as a pioneer of industrial lithium-ion batteries to develop the battery structure of the LIM50E Module, which is suitable for mass-production and offers great cost performance. In addition, we create module designs that respond to the needs of our customers. The volume energy density has been increased by more than 50%, while the mass energy density has been increased by more than 30% compared with our previous products. It is also equipped with a function to transmit battery information to chargers and systems as well as a function that constantly monitors the overall cell voltage and module temperature.

## Benefits

The benefits of a smaller and lighter battery module are as follows:

- Small spaces can be effectively used.
- The burden of maintenance can be reduced.
- Energy efficiency can be improved.



Industrial Lithium-ion Battery Module  
“LIM50E-8G” (left), “LIM50E-7G” (right)

## 【Specification】

Model	LIM50E-7G	LIM50E-8G
External dimensions (mm)	W: 180×D: 412×H: 135	W: 215×D: 414×H: 135
Weight (kg)	15.0	17.5
Nominal voltage (V)	25.9	29.6
Nominal voltage per cell (V)	3.7	3.7
Nominal capacity (Ah)	47.5	47.5
Operating voltage range (V)	19.3~28.7	22.0~32.8
Maximum discharge current (A)	300	300
Maximum charge current (A)	125	125
Operating temperature range (°C)	-10~45	-10~45
Monitoring system	Monitoring of overall cell voltage, monitoring of module temperature	Monitoring of overall cell voltage, monitoring of module temperature

Applicable field  
Smart grids/Electricity storage systems/Power supply system

Water

Energy saving/Energy recovery

ENERGY  
Energy storage/Energy creation

New energy

Waste disposal/  
Recycling/  
Resource saving

Air

Soil

Other

GS Yuasa International Ltd. Industrial Battery Production Division 1-7-13 Shiba-koen, Minato-ku, Tokyo 105-0011 Japan

● TEL / +81-3-5402-5816 ● FAX / +81-3-5402-5832 ● <http://www.gs-yuasa.com/gyp/jp>

\*Note: This publication introduces examples of technologies and products believed useful towards solving environmental and energy issues. In no way does it constitute guarantees concerning their transfer or sale.