



# LITHIUM-ION BATTERY MODULE

The LIM50EL-12 from GS Yuasa is a premium rechargeable Lithium-ion battery module. This module utilizes inherently safe LMO chemistry and is are manufactured in Japan using the highest quality components and under rigorous Japanese quality control standards. This long service life, high cycle life battery is designed to deliver excellent performance in high-power applications where high charge and discharge rates are required.

The LIM50EL-12 module is ideally engineered for the requirements of a wide variety of industrial energy storage applications including: UPS, Renewable Energy, Smart Grid Energy Storage and Automated Guided Vehicles (AGV). The high performance LIM50EL-12 from GS Yuasa is an excellent choice for any energy storage application requiring extremely reliable performance and high power delivery capability.

#### HIGH CYCLE LIFE

+ 11,000 cycles to 100% Depth of Discharge (DoD)

#### LONG CALENDAR LIFE

+ 90% retained capacity at 15<sup>th</sup> year at 25°C

#### **OPERATING TEMPERATURE RANGE**

- + -20°C to +45°C
- + (-4°F to 113°F)

#### PARTIAL STATE OF CHARGE PERFORMANCE

+ Performance not effected by partial state of charge (PSOC) operation

### COMPLIANCE

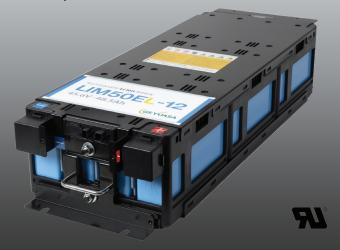
- + UL1973
- + UL9540A

### **RAPID CHARGING**

+ Charges to 70% of rated capacity in less than 30 minutes

#### BATTERY MANAGEMENT SYSTEM (BMS)

+ Integrated BMS actively balances cells and monitors cell voltage, temperature, SOC, over current and overcharge. Accessible through CANbus, RS-495, or local touch panel

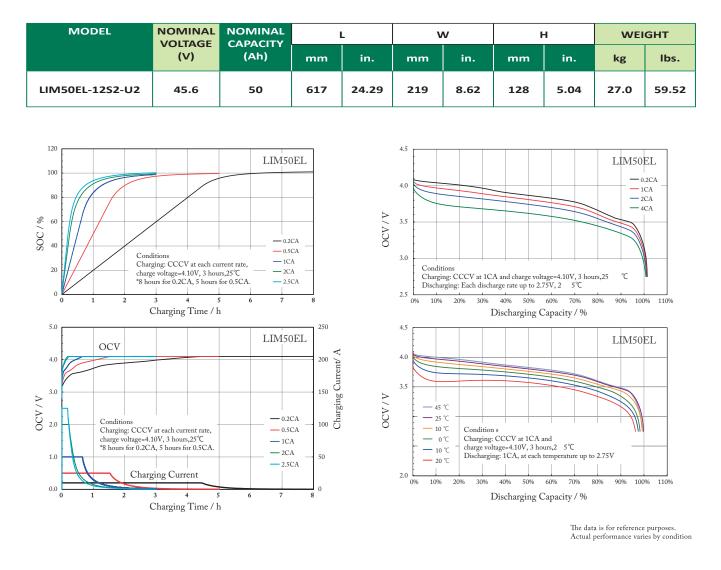






## LIM50EL-12 MODULE LONG LIFE LITHIUM BATTERY

#### SPECIFICATIONS



#### ABOUT GS YUASA ENERGY SOLUTIONS, INC.

GS Yuasa has maintained a strong leadership position in lithium-ion technology since the mid-1990s when we first delivered cells for handheld devices. Our commitment to innovation has driven our expansion into various industrial and space/ aerospace applications, including the International SpaceStation. Building upon our highly reliable technology, we introduced the LIM (Lithium Industrial Module) Industrial Battery Series, which has been in mass production since 2002 and continues to serve customers worldwide as a trusted energy storage solution. LIM cells and modules are designed and manufactured in Japan, ensuring the highest quality standards. Our proven LIM50EL-12 module is now available as a UPS Battery System configuration for mission critical data center applications.



GS Yuasa Energy Solutions, Inc. 1150 Northmeadow Pkwy. Suite 110 Roswell, GA 30076 (800) 472-2879 www.gsyuasa-es.com



MKT057 ver.1.0 7-2023