

# LITHIUM-ION CELLS AND MODULES

For energy storage systems and traction batteries



High energy density

**260** Wh/kg

## Advantages

- Long cycle life
- Wide operating temperature range
- Modular architecture
- Easy installation

## Applications



### Traction battery

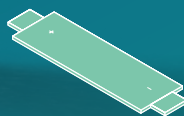
- E-scooters & e-bikes
- Warehouse & golf cars
- Electric vehicles



### Energy storage system

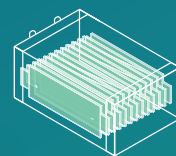
- Uninterruptible power supply
- Renewable energy sources
- Off-the-grid houses

## Price



### Cell

Retail price: \$199 per 1 kWh



### Module (12 cells)

Retail price: \$249 per 1 kWh

## Enertech lithium-ion cells

Type of cathode material	NMC (nickel-manganese-cobalt)	
Rated capacity	60 Ah	53 Ah
Energy density	260 Wh/kg / 598 Wh/l	239 Wh/kg / 526 Wh/l
Rated voltage	3.70 V	3.70 V
Maximum charge / discharge currents	1.5C (90 A) / 2C (120 A)	2C (106 A) / 4C (212 A)
Operating voltage range	2.7 ~ 4.2 V	2.7 ~ 4.2 V
Operating temperature range	Charge -20 °C ~ 60 °C (at only limit condition -30 °C ~ -20 °C) Discharge -20 °C ~ 60 °C (at only limit condition -30 °C ~ -20 °C)	
Dimensions (length x height x thickness)	302 x 100 x 12.3 mm	
Price	Retail price: \$199 per 1 kWh	

## Battery module with 60 Ah lithium-ion cells

Configuration	12S1P	4S3P	6S2P
Rated capacity	60 Ah	180 Ah	120 Ah
Rated energy	2.66 kWh	2.66 kWh	2.66 kWh
Rated voltage	44.4 V	14.8 V	22.2 V
Operating voltage range	32.4 ~ 50.4 V	10.8 ~ 16.8 V	16.2 ~ 25.2 V
Gravimetric energy density	222.0 Wh/kg	222.0 Wh/kg	222.0 Wh/kg
Maximum charge currents	1.5C (90 A)	1.5C (270 A)	1.5C (180 A)
Maximum discharge currents	2C (120 A)	2C (360 A)	2C (240 A)
Weight	~12 kg		
Price	Retail price: \$249 per 1 kWh		

## Battery module with 53 Ah lithium-ion cells

Configuration	12S1P	4S3P	6S2P
Rated capacity	53 Ah	159 Ah	106 Ah
Rated energy	2.35 kWh	2.35 kWh	2.35 kWh
Rated voltage	44.4 V	14.8 V	22.2 V
Operating voltage range	32.4 ~ 50.4 V	10.8 ~ 16.8 V	16.2 ~ 25.2 V
Gravimetric energy density	196.1 Wh/kg	196.1 Wh/kg	196.1 Wh/kg
Maximum charge currents	2C (106 A)	2C (318 A)	2C (212 A)
Maximum discharge currents	4C (212 A)	3C (477 A)	4C (424 A)
Weight	~12 kg		
Price	Retail price: \$249 per 1 kWh		