



# Battery Energy Storage Systems

## 04HC | 20HC



## Best-in-Class Battery Energy Storage & Engineering Support



### Engineering Support & Services

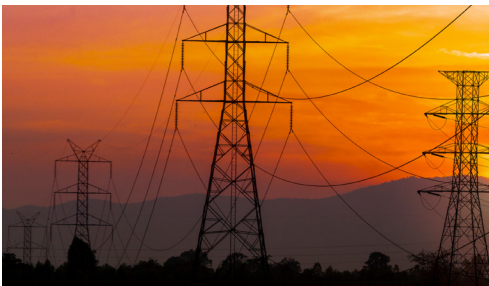
- ▶ Engineering support, including sizing, design assistance, and integration
- ▶ Energy Asset Monitoring Platform with 24/7 access to Command Center support
- ▶ Factory startup and commissioning available
- ▶ 10-year, third party-backed warranty with standard performance guarantee
- ▶ Utility-hardened microgrid control / EMS by OATI
- ▶ Best lead times in the industry



### Highest Safety

- ▶ High thermal stability with liquid cooling; 20% less parasitic loads than air-cooled
- ▶ Compact & robust designs to fit any application requirements
- ▶ Less mechanical stresses with 10,000+ cycle life
- ▶ Seven levels of software protection

## Safe. Reliable. Optimal Performance.



### Key Features

*Improved safety characteristics and optimized for reliability and performance.*

### Product Certifications

- UL9540\* (depending on configuration)
- UL9540a Tested
- UL1973
- IEC62619

### Design features all platforms

- Liquid-cooled
- LFP Chemistry
- -40° to 140° F operating temperature
- >160 KWh /kg Energy Density

**Supporting developers, EPCs, integrators, engineers, contractors & end-users from conception through completion as an extended resource.**



## Battery Energy Storage Systems

Liquid-cooled Battery Energy Storage System based on prismatic LFP cells with highest lifecycle performance.

### FEATURES ALL PLATFORMS

Energy Efficiency	>94%
Max Altitude	<13,000 ft
Ambient Temp Range	-40°F to 140°F
Rated Cell Life	70% Retention 10,000 cycles (0.5°C at 77°F)
Configurations	04HC: 1P384S 20HC: 10P384S

### 04HC-0344-DC

Capacity	3.2V / 280 AH
Nominal Energy	344 kWh
Max kW	172kw / kVA
Dimension	4.26'L x 4.26'W x 7.54'H
Weight	6,500 lbs
Protection	IP 55

### 20HC-3440-DC

Capacity	3.2V / 280 AH
Nominal Energy	3440 kWh
Max kW	1720kw / kVA
Dimension	19.87'L x 7.99'W x 9.5'H
Weight	66,320lbs
Protection	IP 54

### COMMUNICATION PROTOCOLS

Interfaces	RS485, Ethernet, GPRS
Protocols	DNP3.0, Modbus, IEC 103 IEC 104, Web API

### ELECTRICAL

Rated Voltage	1228.8V
Rated Voltage Range	900.0 - 1401.6V
Coolant	50% Water 50% Glycol

### 04HC-0386-DC

Capacity	3.2V / 300 AH
Nominal Energy	368 kWh
Max kW	184kw / kVA
Dimension	4.26'L x 4.26'W x 7.54'H
Weight	6,700 lbs
Protection	IP 55

### 20HC-3686-DC

Capacity	3.2V / 300 AH
Nominal Energy	3686 kWh
Max kW	1843kw / kVA
Dimension	19.87'L x 7.99'W x 9.5'H
Weight	68,785 lbs
Protection	IP 54