



C-BESS H-Series

This plug & play Energy Storage System combines the components necessary to provide Off-grid, Microgrid backup as well as On-grid services. The ESS is pre-engineered, assembled, wired and tested in the factory before shipping.

Integrates Onsite Assets

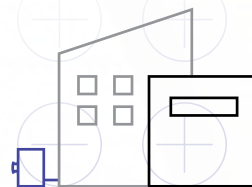
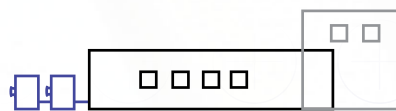
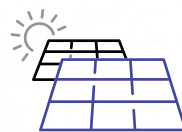
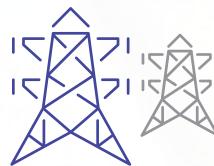
The Battery Energy Storage System integrates, communicates with, and controls assets such as on-site PV inverters, diesel, propane, and natural gas generators, as well as grid power. The system is Microgrid ready with black start capability and ships with an external grid disconnect contactor sized to meet a site's backup needs.

Safety & Compliance

The ESS incorporates the highest safety and compliance standards including UL 9540 for full-system safety, UL 9540A for battery safety, as well as inverter UL and IEEE certifications. The fire protection system incorporates multiple levels of safety.

The Current Energy Storage Advantage

Our team will proactively work with your engineers and electricians to support early design development, system installation, on-site commissioning, and testing. We develop low voltage and communication drawings for each site. We will also work with your team to develop a site-specific line drawing.



CURRENT ESS MICROGRID

H-SERIES Technical Specifications (Per PCS)

AC Parameters	PCS Storage Inverter
Continuous AC Current (On-Grid) 15kW	62.5A
Continuous AC Current (Off-Grid) 15kW	50A
Overload AC Current 10 Sec	24kW
Continuous AC Power (On-Grid)	15kW
Continuous AC Power (Off-Grid)	12kW
Rated AC Operating Voltage	240/120 VAC
AC Line Nominal Frequency	50/60Hz
Power Factor	+/- 0.9 – 1.0
Response Time (Grid-Tied to Off-Grid)	5 ms
Parallel Stacking	Yes – Contact Current for application
Continuous AC Power Grid or Generator	48kW


PV Parameters (DC Coupled)	PCS Storage Inverter
MAX Allowed PV Power (PER PCS)	19.5kW
MAX DC Voltage	500V @ 26A
MPPT Voltage Range	124 – 425V
Number of MPPT (per PCS)	3
Max Solar Strings Per MPPT	2
Max AC Coupled PV input (per PCS)	19.0kW

Battery Pack	Per Rack
Battery Chemistry	LiFePO
Energy	35.5kWh
Capacity	74Ah
DC Voltage Range	43 – 63 VDC
Nominal Voltage	48 VDC
# modules per rack	10
Cycle Life (# of Cycles)	> 6000 at 25° C

Communications	
Cell Modem	4G LTE
LAN	(16) Unmanaged Ports
RS 232/422/485	(2) COM ports
Digital Inputs and Outputs	5 inputs and 5 outputs
USB	(3) 3.0 Ports
Canbus	(1) port
Gateway HMI	Included

Safety	System
AC Output Breakers – 200A	Included
PV DC Disconnect	Included
PV Rapid Shutdown	Included
EMS and BMS UPS	Included

Environmental Specifications	Enclosure (Max 2 Racks Per Enclosure)
Dimensions (L x W x H)	60" x 36" x 84"
Enclosure Weight (Shipping)	2039 lbs
Enclosure 35 / 70 kWh (Installed)	2513 lbs / 3425 lbs
Ambient Temperature Range	-25 to 50° C, De-rated from 45 – 50° C
Rated Max Elevation	1,000 Meters Full Power Up to 3,000 Meters with De-rating
NEMA Rating	NEMA 3R
Cable Entry	Conduit path provided (Base)
Fire Suppression	Novac 3M

Microgrid Controller (EMS)		
	Off-Grid	Black Start, Solar and Generator Integration
	Grid-Tied Microgrid	Peak Shaving, Seamless Backup, Time of Use Shift

Certifications and Compliance	
PCS	IEEE 1547 and UL 1741SA
Battery Racks	UL 1973, IEC 62619, UL 9540A
Enclosure	UL 9540

Product Part Numbers	
BESS Units	Number of BESS Enclosures
C-BESS 15 – 35	1
C-BESS 30 – 70	1
C-BESS 60 – 140	2
C-BESS 90 – 210	3

Current Energy Storage and ELM Fieldsight have been partners in designing and developing Energy Storage Systems since 2016. Our partnership today extends through selling and marketing a broad range of BESS systems manufactured by ELM. Contact us today for more details.

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