



## C-BESS MG 500 kW

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

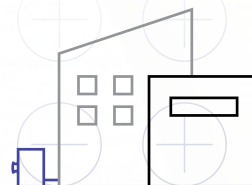
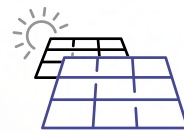
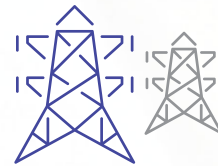
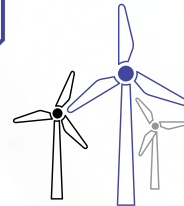
The Battery Energy Storage System integrates, communicates with, and controls assets such as on-site PV inverters, diesel, propane, and natural gas generators, as well as grid power. The system is Microgrid ready with black start capability and ships with an external grid disconnect contactor sized to 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 9540 A 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

# C-BESS 500 – 1000 Technical Specifications

## AC Parameters

Continuous AC Current	602 RMS
Overload AC Current	110% 10 Minute / 125% 10 Second
Continuous AC Power	500 kW @ 480
Rated AC Operating Voltage	480 VAC
AC Line Nominal Frequency	50 / 60 Hz
Peak Efficiency	97%
Power Factor	0/0 Leading or Lagging

## Battery Rack

### Per Rack

Battery Chemistry	NMC
Energy	110 kWh
Capacity	110 Ah
DC Voltage Range	740 – 1475 VDC
Nominal Voltage	1006 VDC
Max DC Current	139 A
# modules per rack	17 modules
Battery Capacity	1100 kWh (Expandable)

## Safety

AC Breaker	Included
DC Disconnect	Included
DC Input Fuses	Included
EMS and BMS UPS	Included

## Environmental Spec.

### Enclosure

Dimensions (L x W x H)	170" x 75" x 111"
Enclosure Weight (Shipping)	7000 lbs
Enclosure 1100 kWh (Installed)	26000 lbs
Paint Tested	1000 Salt Hour Spray
NEMA Rating	NEMA 3R
Cable Entry	Conduit path provided (Base)
Temperature Range	-20°C to 50°C
Fire Suppression	Hybrid Novec 3M-Dry Pipe Water UL Listed Fire Panel

## 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

## Microgrid Controller (EMS)

	Off-Grid	Black Start, Solar and Generator Integration
	Grid-Tied Microgrid	Peak Shaving, Seamless Backup, Demand Response, Time of Use Shift

## Certifications and Compliance

PCS	IEEE 1547 A and UL 1741 SA
PCS	CA RULE 21 PJM, RoHS, Reach
Battery Racks	UL 1973, IEC 62619, UL 9540 A
Enclosure	UL 9540
Arc Flash Evaluation	On File

## Optional Safety / Expansion

Enclosure	Deflagration Panels
Honeywell LI-ION Tamer	Off Gas Sensing
Battery Expansion Package	Up to 1320 KWh / Expansion Enclosure

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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