



ELM MICROGRID

GEN2

ELM MicroGrid, a trusted name in battery energy storage, is excited to introduce our second-generation BESS. Meet Gen2 - a streamlined system that is packed with even more power.

- Gen2 utilizes EPC's CAB 1000 inverter, now at 1.5MW 690VAC. This represents a **50% increase in output** from our original inverter.
- The **containers mount essentially flush**, only needing 10 inches of separation on the 2 short sides. This allows the back side to be mounted flush to a wall or another container.
- The **ESS interconnection between the battery containers is now situated on the roof** of Gen2. This greatly reduces the amount of underground conduits and shrinks the overall footprint.
- Gen2 is transitioning from NMC (Nickel Manganese Cobalt) to **LFP (Lithium Iron Phosphate) batteries, extending the battery life from 15 to 20 years**, while also adopting liquid cooling over air cooling for improved efficiency.
- We have extended the uninterruptible power supply (**UPS) capability to 24-48 hours**, a significant enhancement from the previous 45-minute UPS capacity.
- To streamline installation and ensure quality control, **batteries will now be installed in the factory** rather than on-site. This also **drastically reducing labor costs** and time!

THE ELM ADVANTAGE

POWER MANAGEMENT

Solar and Generator Input
 Solar Automated Control
 Generator Automated Control
 Grid Power
 TOU Shifting
 Peak Shaving
 Off Grid Compatibility

TURNKEY SOLUTION

UL 9540 Factory Certification
(in progress)
 NFPA 855 Compliant
 Full Factory Testing
 Rapid Onsite Deployment

INCLUDES

ELM FieldSight Controller
 ELM FieldSight Cloud
 Built In Climate Control
 Built In Fire Suppression
 NEMA 3R Enclosures
 Expandable at Any Time



**NEW 125,000 SQ FT. FACILITY
 NOW OPEN**
 The Colony, TX



4300 Live Oak
 The Colony, TX 75056



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All ELM MicroGrids include full On Grid and Off Grid Capabilities utilizing our proprietary **ELM FieldSight Controller**. FieldSight features advanced microgrid and battery storage technology that optimizes energy usage, provides emergency resiliency, increases power reliability, reduces power grid instability, offers on site generation asset control and energy production and consumption analysis.



ELM Battery Energy Storage Systems (BESS) provides resiliency, CO2 reduction, and the reduction of utility bills. Our system has a modular design with up to 12 battery containers behind a single inverter.





ELM

Preliminary Technical Specifications	MG 1500 4 Hour System	MG 1500 2 Hour System
System Sizing		
System Sizing	10 ELM BESS Modules + 1 EPC Cab 1000 Inverter	5 ELM BESS Modules + 1 EPC Cab 1000 Inverter
AC Output Power (Discharge)	1500kW	1500kW
AC Input Power (Charge)	1500kW	1500kW
Battery Capacity	6880kWh	3440kWh
Three Phase Operation		
AC Voltage	690 VAC	690 VAC
AC Input/Output Current	1255A	1255A
AC Frequency (Field Settable)	50/60 Hz	50/60 Hz
MAX AC Overcurrent Protection	1600A	1600A
Peak Efficiency	0.97	0.97
AC Connection	3 Phase, 3 Wire	3 Phase, 3 Wire
Equipment Specifications		
kWh Per Module	688kWh	688kWh
Battery Chemistry	LiFePO4	LiFePO4
Module External Dimensions (L x W x H)	126" x 59" x 108"	126" x 59" x 108"
Module Weight	17,000 lbs	17,000 lbs.
Lifting Provisions	Fork Lift Slots <i>(included)</i> or Hoist Lifting Rings <i>(sold separately)</i>	Fork Lift Slots <i>(included)</i> or Hoist Lifting Rings <i>(sold separately)</i>
Paint Tested	1000 Salt Hour Spray	
Fire Suppression	Aerosol	Aerosol
Operating Temperature Range	-20°C to 50°C	-20°C to 50°C
Expansion		
DC Maximum Expansion	Additional 2 Modules - 12 Total	Additional 7 Modules - 12 Total

ALL ELM MICROGRID SYSTEM FEATURES

Control Software	
ELM Autonomous MicroGrid Site Control System	⚡
Access & Alerts on Desktop & Mobile 24/7	⚡
Asset Monitoring System Level & Individual	⚡
Individual Microgrid Component Pages	⚡
Local HMI IP 65 Touchscreen	⚡
Communications: Wifi, Ethernet, Cellular	⚡

Operation Parameters	
Islanded Mode	Off Grid Applications
Grid Tied Mode	Peak Shaving Backup Power Demand Response
Distributed Generation	Time of Use Operation
Certifications	
Batteries	UL 1973, UL 9540A
Inverter	UL 1741 SB
System	**UL 9540 Pending**
Temperature Range	-20°C to 50°C

Key System Components	
NEMA 3R Enclosure	⚡
Climate Controls	⚡
Bi Directional Storage Inverter	⚡
DC Disconnect (Battery)	⚡
AC Disconnect (Inverter)	⚡
OPTIONAL FEATURES	
AC Disconnect (Utility Interconnect)	⚡
AC Circuit Breaker (Load Panel)	⚡
PV Disconnect	⚡
Utility Disconnect	⚡





FAMILY OF COMPANIES



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