



The ELM Microgrid Turnkey Package is shipped as a self-contained unit and can be installed outdoors or indoors.



## MICROGRID 250 PACKAGE

### Turnkey Solution

- Factory Assembled
- Pre-Engineered
- Pre-Wired
- Pre-Installed Safety Labels
- Pre-Tested

### Managed Assets

- Solar Generation
- Distributed Battery Storage
- Diesel, Propane & Nat Gas Generators
- CHP Systems
- Grid Power

### Communications & Control

- 4G LTE Cellular
- Ethernet and Wifi
- Building Management
- Generator Start and Stop
- Optimal Power Forecasting
- Power Reliability Alerts
- Isochronous Generation Control

### The Switch Advantage

- Turnkey Solution
- Indoor and Outdoor Enclosure Options
- Climate Control
- Fire Suppression Options
- Microgrid Installation & O&M Guides



# Microgrid 250 TECHNICAL SPECIFICATIONS

## Electrical Specifications

### Three Phase Operation

AC Voltage	480 VAC
AC Input/Output Current	300A
AC Output Power ( <i>discharge</i> )	250kW
AC Input Power ( <i>charge</i> )	250kW
Battery Capacity Range (Main Unit)	220kWh - 660kWh
Battery Expansion Module Range	1,320kWh
AC Frequency ( <i>field settable</i> )	50/60 Hz
Max AC Overcurrent Protection	300 A
Peak Efficiency	97%
AC Connection	3 Phase, 3 Wire

## Equipment Specifications

External Dimensions (Main Unit) (LxWxH)	123" x 74" x 105"
External Dimensions (Battery Expansion Module)(LxWxD)	166" x 74" x 105"
Weight	9,680 lbs.
Lifting Provisions	Fork Truck or Lift Strap
Paint Tested	1000 Salt Hour Spray
Fire Suppression Options	Hybrid - 3M Novec 1230
Temperature Range	-20°C to 50°C

## Transfer to and from Islanded Mode

**Upon detecting a grid disturbance, the system disconnects the Microgrid from the grid and seamlessly transitions critical/resiliency loads to Microgrid Islanded mode.**

**While in Microgrid Islanded mode, the system manages solar, wind and generator assets in order to efficiently support the resiliency loads.**

**For higher power or storage requirements multiple systems can be paralleled and additional energy storage containers can be added. Please contact Current Energy Storage for more details.**

## Control Software

Web Portal Hosted on Microsoft Azure
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 MicroGrid	Off Grid Applications
Grid Tied MicroGrid	AI Machine Learning Demand Charge Mgmt. Peak Shaving Self-Consumption Demand Response
Distributed Generation	Time of Use Operation

## Key System Components

NEMA Outdoor Rated Enclosure
Bi Directional Storage Inverter
High Voltage Li Ion Battery DC Disconnect
AC Disconnect ( <i>battery – inverter</i> )
AC Disconnect ( <i>utility interconnect</i> )
Circuit Breaker
Utility Disconnect
Climate Controls

## Certifications

Batteries	UL 1973, UL9540a
Inverter	UL 1741 SA
System	UL 9540 (in process)



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