

FORTRESS POWER

eFlex 5.4 Lithium Battery Storage

UL 9540
UL 9540A
UL 1973



We design the eFlex 5.4 with a goal of building the world most robust lithium battery for all different application scenarios and harsh weather conditions.

- Tier 1 Automotive Prismatic Lithium Iron Phosphate Cell with the highest cycle life
- Patented Enclosure design achieves 4 times better thermal performance than our competitors
- IP 65 Dust and Water Proof design for outdoor install
- Flexible mounting options (wall mount, floor-stand or standard 19" industrial server rack mount)

Our market leading Digital Processor Battery Management System (BMS) includes:

- High amperage Contactor Disconnects
- Individual cell voltage & temperature monitoring and balancing for maximum reliability and longevity
- Canbus, Modbus, and Wi-Fi communication enable Internet-of-Things compatibility
- Advanced closed loop communication with most 48V inverters

Application Scenarios:



Electrical Specifications	
Nominal Voltage:	51.2V
Nominal Capacity:	105AH
Rated Capacity @ 0.5C (50A):	5.374 kWh
Resistance:	<10 mΩ
Efficiency (at 0.5C):	>98%
Self-Discharge:	<1% / Month
Maximum Allowed Modules in Parallel:	30 (162kWh)
Depth of Discharge	Up to 100%
Warranty	10 Years
Cycle Life	8,000 (@ 80% DoD)

Charge Specifications	
Recommended Charge Current:	<55A
Maximum Charge Current:	100A
Recommended Charge Voltage:	54.4V
BMS Charge Voltage Disconnect:	>56V

Discharge Specifications	
Recommended Continuous Discharge Rate:	60A (3KW DC)
Peak Continuous Discharge Rate:	100A (5 KW 60 Min)
Maximum Surge Power Rate:	130A (6.6 KW 5S)
Recommended Low Voltage Disconnect:	48V
Battery Low Voltage Protection:	<45V
Battery recovery Voltage:	45V
Fault Current:	3000A, 5ms

Temperature Specifications	
Discharge Temperature:	-4°F~131°F (-20°C ~ 55°C)
Charge Temperature:	32°F ~ 114°F (0°C ~ 45°C)
Storage Temperature:	20°F ~ 95°F (-6°C ~ 35°C)

Mechanical Specifications	
Dimensions: (L*W*H)	18x23x7.3 inches 446x546x183 mm
Weight:	108 lbs (49kg)
Terminal Type:	M8
Ring Terminal Size:	3/8ths or larger
Terminal Torque:	7.0 – 7.7 Nm (5.1 – 5.7 ft-lb)
Terminal Cover	1 set, Waterproof
Case Material:	Anodized Aluminum
Enclosure Protection:	IP65
Cell Type Chemistry:	Tier 1 Automotive Prismatic - LiFePO ₄

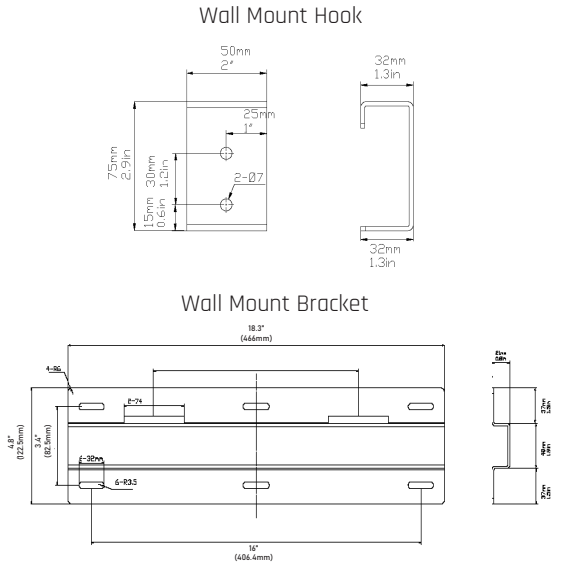
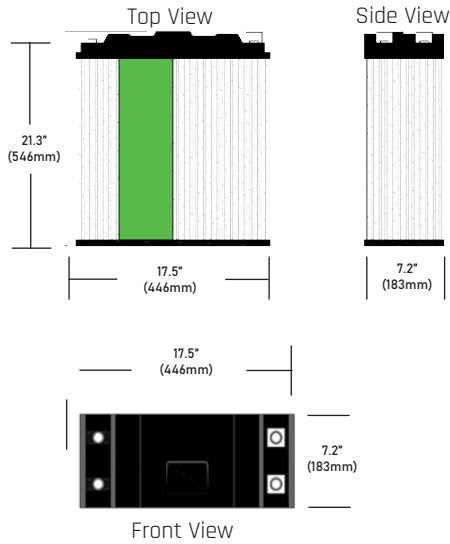
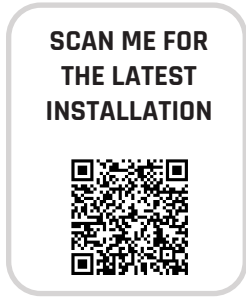
Compliance Specifications:	
Certifications:	UL9540, UL9540A, UL1973, UL1642, CEC, SGIP
Shipping Classification:	UN 38.3, CLASS 9 (Lithium Ion Battery)

Basic Charging Profile	
Bulk + Absorb Charge:	54.4V
Absorb Time:	60 minutes
Float Charge:	54V
Inverter Charging:	2 Stage / No Float
Equalization:	No equalization (typical) 54.6V for 10 seconds (rare)
Temperature Compensation:	None



Compatible with Most Inverters on the Market: **Schneider, Sol-Ark, SMA, Midnite Solar, OutBack Power, Morningstar, Phocos, Victron Energy, Growatt**

DIMENSIONS:



FlexTower/DuraRack

for Fortress eFlex 5.4 kWh lithium batteries

- IP65 water and dust proof for indoor & outdoor installation. NEMA3R
- Supports Off-grid, Back-up, Zero Export, Time-of-Use, Demand Response, Peak Shaving, and Virtual Power Plant
- AC or DC couple to existing or new PV arrays
- Flexible & Easy Install
- Whole Home Backup with 200A Grid Pass-through
- >98% Battery Efficiency
- Compatible with Din-Rail Heaters to maximize lifecycles in cold climates



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