



eFLEX 5.4

LITHIUM ION PHOSPHATE BATTERY

The Fortress Power eFlex is a 5.4 kWh scalable energy storage solution based on safe and energy dense prismatic Lithium-Iron-Phosphate cells. The high amperage, smart Battery Management System (BMS) includes relay disconnects, closed-loop inverter communication, cell voltage and temperature monitoring, and cell balancing to maximize reliability and longevity, as well as wifi for internet-of-things compatibility. The unit can be wall mounted, floor mounted, and server rack mounted.

- 98% Roundtrip efficiency
- High Durability and Long-Lasting
- Safe Lithium Iron Phosphate Technology (LiFeP04)
- Flexible mounting options

- Remote monitoring
- Advanced cell level monitoring and balancing
- Close-loop communication with many hybrid inverters
- Canbus, Modbus, and wifi communication

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:	15

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

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:	3/8 ths or larger
Terminal Torque:	7.0 – 7.7 Nm (5.1 – 5.7 ft-lb)
Case Material:	Anodized Aluminum
Enclosure Protection:	IP65
Cell Type Chemistry:	Prismatic - LiFeP04

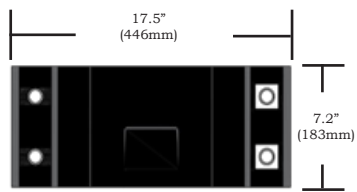
Compliance Specifications:

Certifications:	UL1973, UL1642
Shipping Classification:	UN 38.3 CLASS 9 (Lithium Ion Battery)

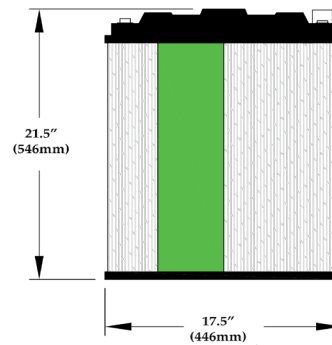
Basic Charging Profile

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

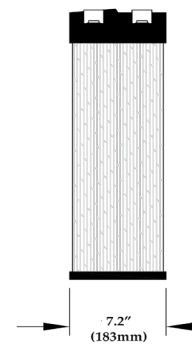




FRONT VIEW

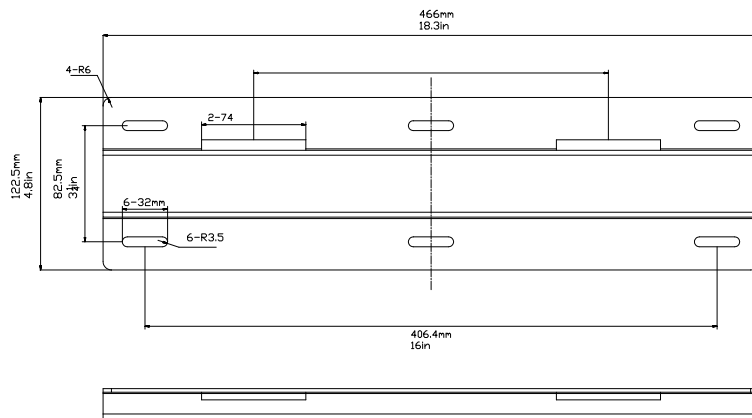


TOP VIEW

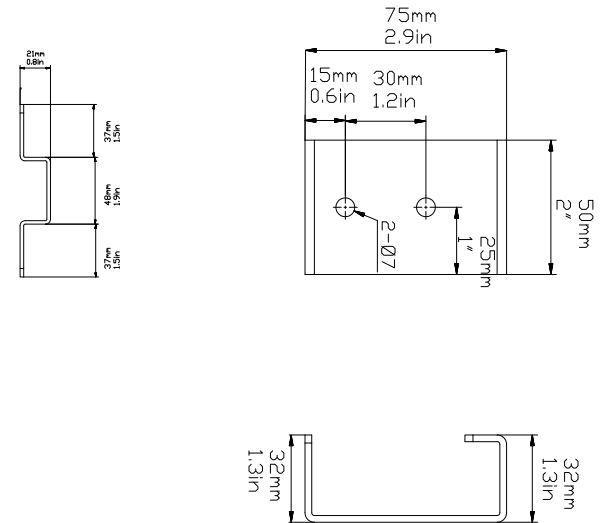


SIDE VIEW

Wall Mount Bracket



Wall Mount Hook



Server Rack Mount Bracket

