



# Discover the future of energy management with our cutting-edge Energy Storage System.

By choosing our innovative solution, you can significantly reduce your energy costs while simultaneously harnessing the power of renewable energy sources.

Embrace the future of sustainable energy with our best-in-class technology and take control of your energy today.

# Battery Energy Storage Systems





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# **EnerShed**Energy Storage System

A stationary energy storage system befitting the Myers Emergency Power Systems brand.

## **Uncompromised Capability**

Simplicity and configurability, with EnerShed, you get both. Our 30 kW AC module enables significant sizing flexibility, allowing you to design your energy storage system to your exact needs, every time.

## Highest Energy Density with the Lowest Operating Costs

The forced air cooling means you get a leading energy density that is compact and simple to maintain, with no liquid cooling or HVAC equipment to cause headaches or take up space.

### **Unmatched Reliability**

Myers has over 60 years of experience providing emergency power systems for critical infrastructure, from emergency lighting to rail and transit. We've taken that expertise and put it into EnerShed, a stationary energy storage system for the commercial market that you can rely on.



# Highly Configurable

A modular design allows for precise sizing of both power electronics and battery energy, while remaining completely scalable.



# Turnkey Solutions

All units arrive to their pre-prepped pad fully assembled, factorytested, and ready for connection.



Defense In Depth

Safety is embedded in every level throughout the system to continuously monitor, detect, and halt potential anomalies.





# **EnerShed SM**

# **Energy Storage System**

Rated AC Output Power: 60 kVA - 150 kVA Capacity: 260 kWH - 430 kWH



EnerShed SM 150 kVA/500 kWh = 150 kWh/m2



Competitor A 150 kW / 372 kWh = 79.5 kWh/m2



Competitor B 125 kW / 279.5 kWh = 99.3 kWh/m2

# **General Specifications**

| Model                        | EnerShed 60   |                         | EnerShed 90             |                         | EnerShed 120            |                         | EnerShed 150            |                          |
|------------------------------|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| Rated AC Output<br>Power     | 60 kVA  |                         | 90 kVA                  |                         | 120 kVA                 |                         | 150 kVA                 |                          |
| Capacity*                    | 100 kWh   | 200 kWh                 | 150 kWh                 | 300 kWh                 | 200 kWh                 | 400 kWh                 | 250 kWh                 | 500 kWh                  |
| Rated AC Current             | 72.5 A (PF=1)   |                         | 108.8A (PF=1)           |                         | 145.0 A (PF=1)          |                         | 181.3 A (PF=1)          |                          |
| Max Continuous<br>AC Current | 76.0 A (PF=1)   |                         | 114.0 A (PF=1)          |                         | 152.0 A (PF=1)          |                         | 190 A (PF=1)            |                          |
| Cycle Life                   | 80% SoH @ 4000 cycles, 25C                                    |                         |                         |                         |                         |                         |                         |                          |
| System Weight                | 2,295 kg<br>(5,049 lbs)                                       | 2,905 kg<br>(6,391 lbs) | 2,625 kg<br>(5,797 lbs) | 3,670 kg<br>(8,074 lbs) | 2,985 kg<br>(6,567 lbs) | 4,435 kg<br>(9,757 lbs) | 3,345 kg<br>(7,374 lbs) | 5,200 kg<br>(11,440 lbs) |
| Regulatory                   | UL9540, UL9540A, UL1741 SA/SB, IEEE 1547-2020, UL1642, UL1973 |                         |                         |                         |                         |                         |                         |                          |

# **Operating and Mechanical Data**

| Dimensions (H x D x W)                   | 114" x 87" x 59" |  |  |
|--|------------------|--|--|
| Enclosure                                | Nema 3R          |  |  |
| Corrosion Category IEC 61701             | C5               |  |  |
| Cooling                                  | Forced Air       |  |  |
| Operating Temperature<br>Range           | -30 C - 60 C     |  |  |
| Storage Temperature Range                | 5 C to 40 C      |  |  |
| Maximum Permissible<br>Relative Humidity | 95%              |  |  |
| Rated Altitude                           | 3000 ft          |  |  |
| Noise Emission                           | 65 dB(A)         |  |  |
| FCC                                      | Class A          |  |  |

# **Electrical Data**

| Nominal AC voltage /<br>Line Connection | 480 Vac / 3-phase<br>Wye       |
|---|--------------------------------|
| Grid Frequency                          | 60 Hz                          |
| Harmonics (THD)                         | <5%                            |
| PF at rated power / displacement        | 1/0.8 Leading<br>- 0.8 Lagging |
| Communication                           | SunSpec over<br>ModBus TCP/IP  |

\*Nominal usable energy at AC terminals, Day 1. Consult with Myers for additional power and capacity sizes not shown here.





# **EnerShed MD**

# **Energy Storage System**

Rated AC Output Power: 270 kVA Capacity: 515 kWH - 775 kWH



EnerShed MD 270 kVA/900 kWh = 108 kWh/m2



Competitor A 250 kW / 1000 kWh = 67 kWh/m2



Competitor B 250 kW / 930 kWh = 95.4 kWh/m2

# **General Specifications**

| Model                        | EnerShed 180  |                          | EnerShed 210             |                          | EnerShed 240             |                           | EnerShed 270             |                           |
|------------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| Rated AC Output<br>Power     | 180 kVA   |                          | 210 kVA                  |                          | 240 kVA                  |                           | 270 kVA                  |                           |
| Capacity*                    | 300 kWh   | 600 kWh                  | 350 kWh                  | 700 kWh                  | 400 kWh                  | 800 kWh                   | 450 kWh                  | 900 kWh                   |
| Rated AC Current             | 217.5 A (PF=1)  |                          | 253.8 A (PF=1)           |                          | 290.0 A (PF=1)           |                           | 326.3 A (PF=1)           |                           |
| Max Continuous<br>AC Current | 228.0 A (PF=1)  |                          | 266.0 A (PF=1)           |                          | 304.0 A (PF=1)           |                           | 342.0 A (PF=1)           |                           |
| Cycle Life                   | 80% SoH @ 4000 cycles, 25C                                    |                          |                          |                          |                          |                           |                          |                           |
| System Weight                | 6,525 kg<br>(14,387 lbs)                                      | 8,955 kg<br>(19,745 lbs) | 6,885 kg<br>(15,181 lbs) | 9,270 kg<br>(21,432 lbs) | 7,245 kg<br>(15,975 lbs) | 10,485 kg<br>(23,119 lbs) | 7,605 kg<br>(16,769 lbs) | 11,250 kg<br>(24,806 lbs) |
| Regulatory                   | UL9540, UL9540A, UL1741 SA/SB, IEEE 1547-2020, UL1642, UL1973 |                          |                          |                          |                          |                           |                          |                           |

# Operating and Mechanical Data

| Dimensions (H x D x W)                | 79" x 129" x 100" |
|---------------------------------------|-------------------|
| Enclosure                             | Nema 3R           |
| Corrosion Category IEC 61701          | C5                |
| Cooling                               | Forced Air        |
| Operating Temperature<br>Range        | -30 C - 60 C      |
| Storage Temperature Range             | 5 C to 40 C       |
| Maximum Permissible Relative Humidity | 95%               |
| Rated Altitude                        | 3000 ft           |
| Noise Emission                        | 65 dB(A)          |
| FCC                                   | Class A           |

#### **Electrical Data**

| Nominal AC voltage / | 480 Vac / 3-phase             |  |  |
|----------------------|-------------------------------|--|--|
| Line Connection      | Wye                           |  |  |
| Grid Frequency       | 60 Hz                         |  |  |
| Harmonics (THD)      | <5%                           |  |  |
| PF at rated power /  | 1/0.8 Leading                 |  |  |
| displacement         | - 0.8 Lagging                 |  |  |
| Communication        | SunSpec over<br>ModBus TCP/IP |  |  |

\*Nominal usable energy at AC terminals, Day 1. Consult with Myers for additional power and capacity sizes not shown here.





# **EnerShed LG**

# **Energy Storage System**

Rated AC Output Power: 570 kVA - 1170 kVA Capacity: 1,115 kWH - 4,770 kWH







EnerShed LG 570 kVA/1900 kWh = 228 kWh/m2

Competitor A 250 kW / 1000 kWh = 67 kWh/m2

Competitor B 1.5 kW / 3720 kWh = 194 kWh/m2

# **General Specifications**

| Model                    | EnerShed 330  |                              | EnerShed 390                 |                              | EnerShed 450                 |                              | EnerShed 510                 |                              | EnerShed 570                 |                              |
|--------------------------|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Rated AC<br>Output Power | 330 kVA   |                              | 390 kVA                      |                              | 450 kVA                      |                              | 510 kVA                      |                              | 570 kVA                      |                              |
| Capacity*                | 550 kWh   | 1,100<br>kWh                 | 650 kWh                      | 1,300<br>kWh                 | 750 kWh                      | 1,500<br>kWh                 | 850<br>kWh                   | 1,700<br>kWh                 | 950 kWh                      | 1,900<br>kWh                 |
| Rated AC<br>Current      | 398.8 A (PF=1)  |                              | 471.3 A (PF=1)               |                              | 543.8 A (PF=1)               |                              | 616.3 A (PF=1)               |                              | 688.8 A                      | (PF=1)                       |
| Max Cont.<br>AC Current  | 418.0 A (PF=1)  |                              | 494.0 A (PF=1)               |                              | 570.0 A                      | (PF=1)                       | 646.0 A                      | (PF=1)                       | 722.0 A                      | (PF=1)                       |
| Cycle Life               | 80% SoH @ 4000 cycles, 25C                                    |                              |                              |                              |                              |                              |                              |                              |                              |                              |
| System<br>Weight         | 18,500 kg<br>(40,793<br>lbs)                                  | 22,955 kg<br>(50,616<br>lbs) | 19,220 kg<br>(42,380<br>lbs) | 24,485 kg<br>(53,989<br>Ibs) | 19,940 kg<br>(43,968<br>lbs) | 26,015 kg<br>(57,363<br>lbs) | 20,660 kg<br>(45,555<br>lbs) | 27,545 kg<br>(60,737<br>lbs) | 21,380 kg<br>(47,143<br>lbs) | 29,075 kg<br>(64,110<br>lbs) |
| Regulatory               | UL9540, UL9540A, UL1741 SA/SB, IEEE 1547-2020, UL1642, UL1973 |                              |                              |                              |                              |                              |                              |                              |                              |                              |

# **Operating and Mechanical Data**

| Enclosure                                | Nema 3R      |  |  |
|--|--------------|--|--|
| Corrosion Category IEC 61701             | C5           |  |  |
| Cooling                                  | Forced Air   |  |  |
| Operating Temperature<br>Range           | -30 C - 60 C |  |  |
| Storage Temperature Range                | 5 C to 40 C  |  |  |
| Maximum Permissible<br>Relative Humidity | 95%          |  |  |
| Rated Altitude                           | 3000 ft      |  |  |
| Noise Emission                           | 65 dB(A)     |  |  |
| FCC                                      | Class A      |  |  |

#### **Electrical Data**

| Nominal AC voltage /<br>Line Connection | 480 Vac / 3-phase<br>Wye       |  |  |
|---|--------------------------------|--|--|
| Grid Frequency                          | 60 Hz                          |  |  |
| Harmonics (THD)                         | <5%                            |  |  |
| PF at rated power / displacement        | 1/0.8 Leading<br>- 0.8 Lagging |  |  |
| Communication                           | SunSpec over<br>ModBus TCP/IP  |  |  |

\*Nominal usable energy at AC terminals, Day 1. Consult with Myers for additional power and capacity sizes not shown here.

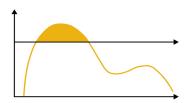


Battery Energy Storage Systems (BESS) are instrumental for enhancing Energy Resiliency, acting as a reliable backup power source during grid outages, natural disasters, and security threats.

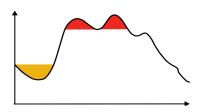
BESS supports microgrids, enabling uninterrupted power supply in isolated regions, and helps manage peak demand to prevent blackouts. It also facilitates the integration of intermittent renewable energy sources, maintaining consistent power output. BESS's versatility makes it indispensable for ensuring continuous energy availability, reducing downtime, and improving overall resiliency in various critical applications. Other use cases include:



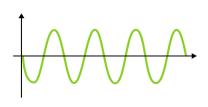
**ENERGY ARBITRAGE** exploits electricity price variations by buying low during off-peak times and selling or using it when prices rise. Beneficial for energy storage systems, like batteries, it stores excess energy during low-demand periods and releases it when prices peak. Profitability depends on price differentials and storage efficiency. In regions with volatile pricing, it promotes sustainability and efficient energy use.



**ENERGY DEMAND RESPONSE** is a strategy in the energy industry that manages electricity demand during peak periods, incentivizing users to reduce consumption for compensation. Typically run by utilities or grid operators, these programs offer incentives like bill reductions or rebates. They benefit utilities by reducing costly peak generation, minimizing blackout risks, and fostering efficient energy use.



**PEAK SHAVING** reduces grid energy consumption during peak demand by storing energy during low -demand times and using it later. It benefits utilities and large users by lowering peak electricity costs. Energy storage systems, demand response programs, and energy efficiency methods all play a role in peak shaving.



**FREQUENCY REGULATION** maintains grid stability by adjusting Battery Energy Storage System (BESS) power output in response to frequency fluctuations caused by supply-demand variations. BESS equipped with advanced controls rapidly charge or discharge energy, stabilizing grid frequency for reliable, efficient operation.



# **Fire Suppression System**

# 7 Layers of Safety

# **PREVENTION**

#### Design:

Low cell count and LFP prismatic cells ensure safe voltage levels and compliance with UL60950.

#### **Galvanic Isolation:**

Power electronics isolate cell groups, preventing hazards from spreading.

#### Individual Isolation:

Power electronics monitor current, voltage, and temperature every 30 microseconds for rapid shutdown.

#### **Thermal Management:**

Cells are thermally separated and individually cooled to prevent overheating.

#### CONTAINMENT

# Independent 1+1 Redundant Monitoring:

Controls shut off power, discharges energy, and triggers emergency stop in case of temperature anomalies.

#### **Fire Suppression:**

Redundant system complies with industry standards, suppresses fires and eliminates oxygen.

#### **Dry Pipe System:**

Preventative measure triggered by fire department or internal heat breach to prevent fire propagation.

**3 LAYERS OF CONTAINMENT** 



**4 LAYERS OF** 





Smart · Clean · Energy

# **SMALLEST FOOTPRINT IN ITS CLASS**

60kW to ∞

Multi-Family Residential · Commercial and Industrial Facilities