

ThunderBank · Mobile BESS

LIGHTNIN 24/7 LIVE TECH CONSULTATION

678-472-5682 · 470-244-3905

877-433-0313

QUICK FACTS

CHEMISTRY LiFePO4	CAPACITY 270 kWh
DC BUS 48 V nominal	AC OUTPUT 208 V 3ϕ, 90 kVA
CERT UL 1741 / 1973 / 9540A* *or equivalent IEC 62619/62620/UN 38.3 with 9540A pending	SUPPRESSION Built-in (AC panels)

DISCONNECT & CONNECTION LOCATIONS

EMERGENCY STOP	Exterior, rear-right corner. Red/white decal. Latches.
Alternator switch	Cab, left of steering wheel . Kills engine DC charge. Lit = fault, leave OFF.
AC Output	"Waterfall" panel, right side of rear wall. Camlocks G/W/R/BI/Bk.
AC Input	Exterior, front-right. "Input Only". 3 ϕ vertical, 1 ϕ horizontal.
Internal AC panels	Ceiling, center. Fwd = Input, Rear = Output. Suppression inside.
DC bus bars	Under each of the 3 inverter banks; runs join in the ceiling fwd of AC Input panel. Internal, not field-accessible.
Rooftop solar	~2,900 W. Keeps charging in daylight after EMERGENCY STOP — cover with opaque tarp. Internal breakers (right wall, front, under MPPT) not field-accessible in fire .
External PV breakers	Shielded box, rear-left corner , near ABC extinguisher. 3 breakers for customer solar. Field-accessible — flip OFF.
Display (exterior)	Outside, rear-right , unlocked grey Polycase. Live power + alarms. No need to open the door .
Level 2 EV charger	Black jockey box, front-right. Customer deploys for EV charging.

Firefighting Approach

LiFePO₄ is water-suitable. Apply copious water for cooling — do not ration. Lower toxicity and lower runaway risk than NMC, but **SCBA mandatory** (HF gas + organic vapors possible).

ON-ARRIVAL CHECKLIST

- Confirm **EMERGENCY STOP** pressed (rear-right corner). If not, press it.
- Confirm **truck engine OFF + alternator switch OFF** (left of steering wheel) — 3rd DC charge path.
- Visually check camlock connections at AC In / AC Out for arcing or melting.
- Stay-back: **50 ft minimum, 100 ft** if venting / flame / audible relief.
- Call Lightnin for live consult: **678-472-5682** (backup 470-244-3905, 3rd 877-433-0313). Lightnin can grant the incident commander real-time VRM data (cell temps, voltages, alarms).

BATTERY THERMAL EVENT

- Apply water liberally until cell temps stabilize.
- **Monitor 24-48 hr post-extinguish** for reignition.
- Full structural turnout + SCBA.
- Contain runoff where practical; notify environmental authorities.

AC PANEL ELECTRICAL FIRE

- Built-in suppression may have activated. Confirm **EMERGENCY STOP** pressed.
- Treat as Class C until batteries confirmed not involved.
- Suppression activation **cannot be directly confirmed**. Lightnin can monitor compartment + panel temperature trends in VRM as a proxy.

Residual hazards: ~270 kWh stored at 48 VDC even after **EMERGENCY STOP**. Batteries isolated but charged. **Rooftop solar keeps charging in daylight** — cover with opaque tarp to stop. Truck-box panels may be hot — use a thermal-imaging camera before approach. **Vehicle hazards remain** — truck fuel, engine, tires. A truck-cab fire can spread to the BESS in the box.