

Itasca[™] Battery Pack



Itasca[™] is an OPS designed, engineered and manufactured lithium-ion battery energy storage system.

- **Designed and Sized:** For small and medium industrial and commercial customers.
- **Outdoor Installation:** Avoiding valuable real estate and reduces design limitation
- **Installation:** Back-to-back or side-to-side install possible for space optimization
- **Wall Hugging Design:** 20-inch depth allows easy installation in urban setting.
- **Individual String Control:** Flexibility in system design and redundancy, improving system uptime and product reliability multifold.
- **Distributed BMS Architecture:** Providing high resolution monitoring and control.

Working with reputable cell partners like Samsung, OPS provides tailored EV and ESS packs with proven quality and reliability. With over 20 MWh of energy storage systems and 750MWh electric vehicle battery pack deployments across nine countries, OPS has large scale manufacturing and deployment experience in electric vehicles (EV) and energy storage systems (ESS), including microgrid and demand response application.

Nominal Specification

Nominal Pack Voltage	345 V
Maximum Pack Voltage	394 V
Minimum Pack Voltage	307 V
Total Energy	110 kWh
Expected Cycle Life¹	> 3,000
Cooling System	Forced Air
Communication	CAN Bus & ModBus
BMS Organization	Distributed
Dimension (W x D x H)²	1018 mm x 1219 mm x 1981 mm (40.0 in x 48 in x 78 in) 509mm X 2438mm X 1981 mm (20 in X 96 in X 78 in)
Weight	625 kg per cabinet (1378 lbs./cabinet; 2 cabinets per system)
Ingress Protection (IP) Rating	IP54
Safety and Certification	UN38.3, UL1973 (Pending), UL9540 (Pending)
Warranty	2,000 Cycles, 3 Years (Optional 5 Years Extended Warranty)

Operating Conditions and Performance

Recommended Operating Voltage	288 V – 388 V
Recommended Depth of Discharge³	80%
Total Usable Energy⁴	89.28 kWh
Total End of Life (EOL) Energy⁵	71.42 kWh
Discharge Operating Temp. Range	-20 °C – 50 °C
Charge Operating Temp. Range	0 °C – 45 °C
Cycle Life before EOL	> 3,000
Continuous charge and discharge power	55 kW DC

Inverter Specifications (Other Inverter Options Available)

Continuous Power Charge and Discharge	30 kW
Output AC Voltage	480V 3 wire delta
Maximum AC Current	44 A
Maximum Solar Power Input	30 kW
Inverter Efficiency	> 95%

¹ At 25°C cell temperature at 0.5C or lower charge and discharge at 80% DOD

² Two configurations are available back to back or side to side.

³ For optimal cycle life and performance

⁴ At 0.5C Discharge 25°C

⁵ Defined as 80% of starting capacity