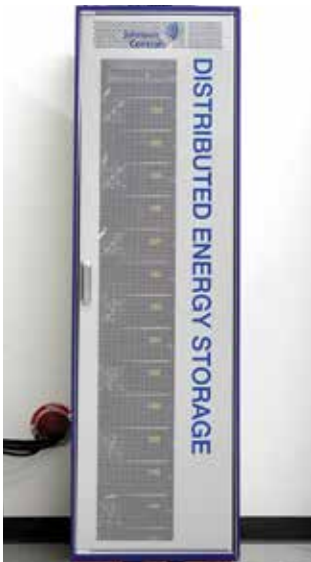


IN-BUILDING DISTRIBUTED ENERGY STORAGE: L1000



Manage energy use, reduce costs and provide backup power for a building, campus or enterprise with the L1000 In-Building Distributed Energy Storage System from Johnson Controls. We combine world-class energy storage technology with buildings expertise and intelligent controls for the solution that performs best with your existing building systems.

The flexible indoor system can be installed in any electrical room connected to the facility grid and delivers maximum benefits:

- **Seamless integration with building systems**, including *Metasys*® and other building automation systems via BACnet® or Modbus. Our advanced controls blend HVAC, lighting, security, and fire safety to optimize whole-building performance and simplify participation in energy markets.
- **Greatest economic benefits** captured through support of multiple applications. The L1000 handles and optimizes for multiple applications, including peak shaving, load shifting, frequency regulation, demand response, and participation in energy markets and incentive programs to cut costs and generate revenue.
- **Customizable system with scalable modules**, that fits your needs, with output from 50kW up to 250kW. Batteries are snapped into racks (no electrician needed) with our controls and embedded software.
- **Local and remote real-time monitoring, diagnostics and control.** The system overview displays energy, power, health, alarm and key performance indicator trends, updated in real time. Detailed views and reports provide additional data.
- **Lowest lifecycle cost** through adaptive algorithms and premium battery composition.

THE L1000 AT A GLANCE

- Indoor solution for buildings, campuses, and enterprises
- Efficient energy management, reduced costs and backup power
- Modular capacity increments of 45 kWh (45 kWh, 90 kWh, 135 kWh)
- Remote and local real-time monitoring and control
- Life up to 20 years, based on application
- *Metasys*® compatible

WHY JOHNSON CONTROLS?

We build solutions that meet today's needs and shape better tomorrows. Distributed Energy Storage from Johnson Controls brings together the company's expertise in batteries and buildings to create smarter buildings with more efficient energy use. As a global diversified technology and multi-industrial leader, Johnson Controls is capable of delivering complex energy storage solutions and has a track record of successfully implementing projects across the globe.

L1000 Product Specifications

Characteristic	BU-50E	BU-100E	BU-125E	BU-50P	BU-100P
Nameplate Storage Capacity (kWh)	45	91	137	46	92
Usable Storage Capacity (kWh)	40.5	81.9	123.3	41.4	82.8
Maximum Charging Power (kW)	45	91	137	92	184
Maximum Discharging Power (kW)	45	91	137	92	184
Output Power (kW)	Dependent upon PCS selected; see PCS specifications in L1000 Product Bulletin				
DC Voltage Range (Vdc)	588 – 823	588 – 823	588 – 823	588 – 823	588 – 823
AC Output Voltage (Vac)	Dependent upon PCS selected; see PCS specifications in L1000 Product Bulletin				
Aux Power Input (Vac)	24 Vdc, 250W (max)				
Building Interface (optional)	Johnson Controls <i>Metasys</i> ® system, ASHRAE BACnet®				
System Monitoring	Local and Remote				
Operating Temperature	0°C to +40°C (System derates if temperature is below +18°C or above +28°C) +32°F to +104°F (System derates if temperature is below +64°F or above +82°F)				
Operating Humidity	5% – 85% relative humidity, non-condensing				
Dimensions (W x H x D)	520 x 1880 x 425 mm 20.5 x 74 x 16.7 in	520 x 2000 x 670 mm 20.5 x 78.8 x 26.4 in	520 x 2000 x 945 mm 20.5 x 78.8 x 37.2 in	520 x 1880 x 425 mm 20.5 x 74 x 16.7 in	520 x 2000 x 670 mm 20.5 x 78.8 x 26.4 in
Approximate Weight	435 kg 959 lbs	800 kg 1764 lbs	1305 kg 2877 lbs	472 kg 1040 lbs	758 kg 1671 lbs

Storage System Sizes

Model	Energy (E)	Power (P)	PCS	Units
BU-50	45	46	None	kWh
BU-100	84	91	None	kWh
BU-125	137	–	None	kWh
Model	Energy (E)	Power (P)	PCS	Units
SU-50	45	46	50	kWh/kW
SU-100	84	91	50	kWh/kW