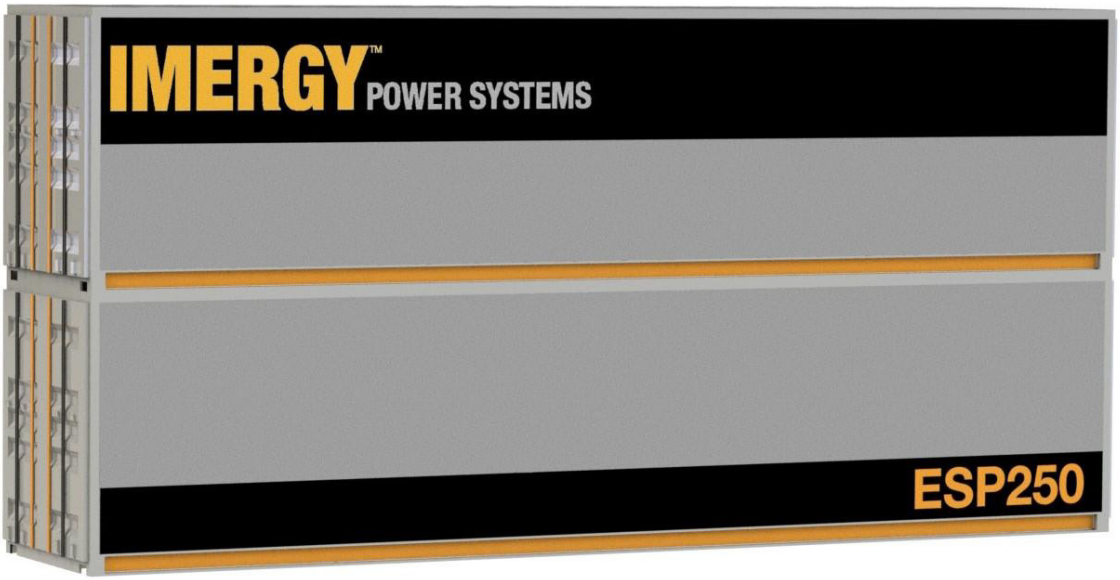
IMERGY ESP250™ SERIES



Large Scale Energy Storage Platform (ESP)

Imergy Power Systems' versatile energy storage solutions will reduce your energy costs and provide you with better power quality, reliability and resilience. This turnkey energy storage solution is inherently scalable with available powers ranging from kilowatts to multiple megawatts and, independently, with available energy ranging from two to eight hours output duration. Imergy's solutions integrate seamlessly with intermittent renewable power sources in applications ranging from grid-connected commercial buildings, to islanding smart microgrids, to utility-scale solar and wind, and enable multiple benefits such as demand cost reduction, shifting peak generation to match peak load, and operation regardless of grid failure. Our disruptive patented technology, with long life and unlimited charge-discharge cycle capability, puts the power in your hands.

Key Features

- Turnkey solution in secured weatherproof enclosure
- Safe: non-flammable, non-explosive
- Modular and scalable; ability to independently size power and energy
- Unlimited cycles; partial, full, at any DOD
- 100% performance at all temperatures
- Long life and lowest LCOE of all battery storage systems
- Power security (system can operate in full islanded mode)
- Power quality (fast response time for seamless power source transitions, load transients, PV firming)
- Smart grid ready monitoring and communication
- Low maintenance
- Sustainable design; recyclable, reusable

Key Applications

- Peak shaving
- Demand response
- Energy shifting
- Utility grid ancillary services
- Renewable energy firming
- Microgrid and back-up power

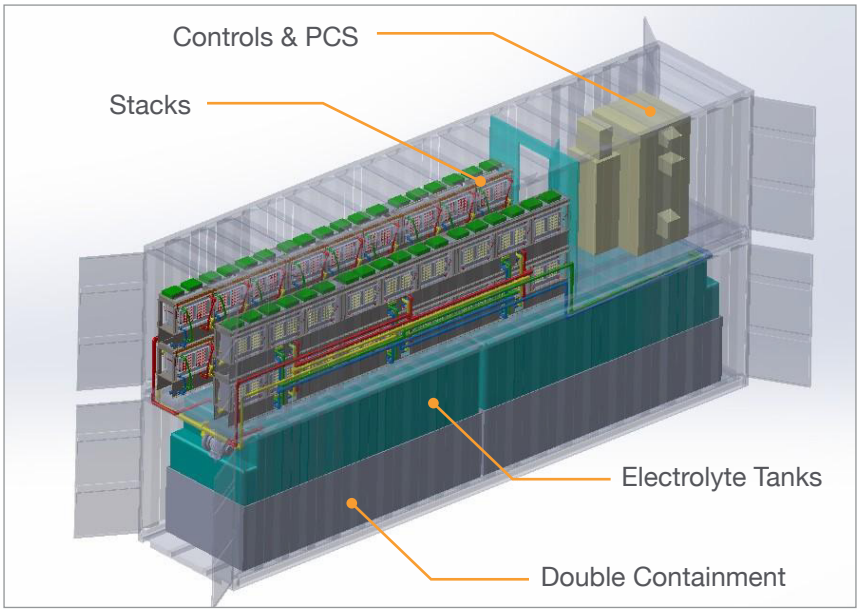
Imergy ESP250™ Specification

Parameter		Rating	Comments
Power rating output (nominal)	380 to 480V 50/60Hz	250 kW	Excludes pulse capability
Response time AC	-100% to 100% output	<70ms	Excludes communication latency effects
Transition between Grid and islanded modes		<100ms	
Dimensions	L x W x H L x W x H	12.0 x 2.4 x 2.6 m / 40 x 8 x 8.5 ft 13.7 x 2.4 x 2.9 m / 45 x 8 x 9.5 ft	40 foot std shipping container (upper) 45 foot high-cube shipping container (lower)
Containerized electrolyte		Determined by hours of storage	Includes secondary containment
Cycles		100,000	No limit. Based on life only
DC DC efficiency		70-75%	Measured at constant current over 100% duty cycle
Storage duration		Up to 8 hours at nominal power	A function of electrolyte tank selection
Capacity range (DOD)		0 to 100%	No life impacts
Communications interface		Modbus / TCPIP	Multiple including CANBUS in multiple strings
Ambient operating conditions		-20°C to +55°C / -4°F to +131°F	Conditioned space not required
Altitude		Up to 2000 m / 6,562 ft	AC derated based on PCS and transformer
Relative humidity		0-95%	
Availability figure		99.16%	Single module
Self discharge	%/day	0.010%	
Noise level dBa 1 meter		<70 dBa	
Weight	kg/lbs	17,780 kg / 39,116 lbs	Excludes electrolyte

The system is designed with intent to comply with the following standards: IEE1547, UL1741, IEC62103 (EN50178)

Specifications are subject to change without notice

Imergy ESP250™ Containerized Module



IMERGY POWER SYSTEMS
© 2015 Imergy® Power Systems, Inc. All rights reserved.
Imergy Power Systems, Inc. Fremont, CA 94539
www.imergy.com sales@imergy.com
12000001005-005