

5 MWh Battery Energy Storage System for North America



CPS ES-5016KWH-US

The CPS Power Block is a 5 MWh battery energy storage system designed for the North American market. The battery system is a containerized solution that integrates 12 racks of LFP batteries and offers a high energy density for utility applications. It is equipped with an advanced liquid cooling system that provides effective and efficient pack-level thermal management. The battery system is packed into a 20 ft container to enable easy transportation, installation, and O&M.

Key Features

- High energy density: 5 MWh in one 20 ft container
- Multiple-point electrical linkage measures
- Easy to expand with CPS's modular and string design
- Fully integrated system with minimum on-site installation and commissioning efforts
- Integrated, fast-acting fault protection
- Comprehensive fire prevention design to ensure system safety
- Smart liquid cooling control to improve battery performance and lifecycle

Product Name	CPS ES-5016KWH-US
Battery Specifications	
Battery cell	LFP 314Ah
Pack configuration	1P52S
Rack/container configuration	12P416S
String configuration	8 packs, 1P416S
Total rated energy capacity	5016 kWh
Rated voltage	1331.2 V
Operating voltage range	1164.8-1497.6 V
Maximum continuous charge/discharge rate	2507.94 kW
General Specifications	
Protection degree	NEMA 3R / IP54
Cooling method	Liquid cooling
Fire suppression	Integrated
Fire extinguisher	Perfluorohexanone (can be replaced per customer request)
Operating temperature range	-13°F to 122°F / -25°C to 50°C
Storage temperature range	-22°F to 140°F / -30°C to 60°C
Operating altitude	≤ 6561.7 ft / 2000 m
Operating humidity	0-95%, non-condensing
Dimensions (W × H × D)	19.88 × 9.50 × 8.00 ft (6058 × 2896 × 2438 mm)
Weight	94798.8 lb / 43 T
Communication interfaces	RS485 / Ethernet / CAN
Communication protocols	Modbus RTU / Modbus TCP / CAN
Auxiliary power input	3P+N 400 Vac / 50 kVA
Compliance	UL1973, UL9540A, UL9540, NFPA 69