

CPS ES-9.6 MW/20 MWh-EU

Large-Scale Energy Storage System



Key Features

- Pre-assembled system design with standard container transport for the entire unit.
- Compartmentalized design of the battery, PCS, and transformer to isolate faults and allow for flexible configurations
- Equipment supplied pre-assembled and factory-tested for rapid on-site grid connection
- System array of up to 9.6 MW to reduce the number of units and lower system costs
- Single-cluster design with unified management to eliminate circulating currents between clusters, ensuring high system availability
- Customized design to facilitate maintenance and expansion
- High-protection system design, ensuring adaptability to various environmental conditions

Model Name	CPS ES-9.6 MW/20 MWh -EU
Model Name (Battery Container, PCS Skid, PMVS Transformer)	Battery container: CPS ES-5015KWH-EU PCS platform: CPS PSA4.8MW-EU PMVS: CPS PSA9.6MO
Battery Parameters	
Battery capacity	4x5 MWh
Battery cell	LFP 314 Ah
Pack Configuration	1P52S
Battery configuration	4x12P416S
Nominal Voltage	1331.2 V
Operating voltage range	1164–1497 V
PCS Parameter	
Nominal AC output power with PF > 0.99	2 × 24 × 200 kW
Operating DC input voltage range	950–1500 V
Output voltage	800 VAC (704–880 VAC)
Grid connection type	Three-phase/PE
Maximum AC output current at 800 V AC	145 A
Nominal grid frequency/grid frequency	50 Hz/60 Hz (±5 Hz)
DC/AC surge protection	Type II
PMVS parameter	
Nominal input voltage	800 V
Nominal AC output power	9.6 MW
Rated average voltage	13.8 kV, 15 kV, 20 kV, 30 kV, 33 kV, 34.5 kV
Grid frequency	50 Hz / 60 Hz
Vector group	Dy11-y11
Cooling method	ONAN
Overvoltage protection	Type II
System Parameter	
Degree of protection	PCS Skid: IP54; Battery Container: IP54; PMVS: IP54
Cooling Method	PCS Skid: variable-speed cooling fans; batteries: liquid cooling; PMVS: ONAN
Operating Temperature Range	From -20 °C to 50 °C (power reduction starting at +45 °C)
Operating altitude	PCS: 9,842.5 feet / 3,000 m (no power reduction); battery container ≤6,562 feet / 2,000 m; PMVS ≤3,281 feet / 1,000 m
Operating humidity	0–95%, non-condensing
PCS skid weight	12T
Battery container weight	4 x 43 t
PMVS weight	<30T
Dimensions (W x H x D)	238.5 x 114.0 x 96.0 inches / 6058 x 2896 x 2438 mm
Display and Communication	
Communication	RS485 / Ethernet / CAN
Communication protocol	Modbus-TCP / RTU
Safety	
Certifications and Standards	Battery: IEC 62477/IEC 61000 / IEC 62619 / IEC 63056 PCS: UL1741, CSA-22.2 No. 107.1-16, IEC61000, IEC62477, IEC62109, EN50549, VDE 4110 and 4120, NTS2.1 PMVS: IEC 62271-202, IEC 50708-3, IEC 62271-200, IEC 61439-2
* Product specifications and dimensions may be updated based on the latest information provided and are subject to change without notice.	