

Energy Storage Container

MEGA PowerX20-5016K



- **Extreme safety**
Cutting-edge hybrid electrolyte solid-state LFP
- **Ultra-Intelligence**
Big data +Age machnism +AI+BMS Control strategy
- **High Efficiency**
EMS+BMS+PCS+TMS+SMS 5S integration

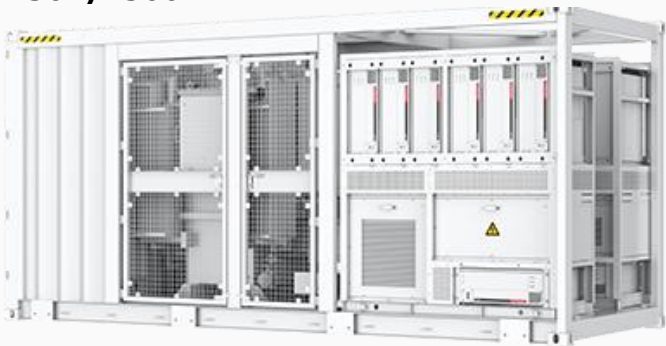
PRODUCT PARAMETERS

Parameters	MEGA PowerX20-5016K
Battery Cell	
Cell Type	314 Ah
Cell Chemistry	Hybrid Electrolyte Solid State LFP
Cycle Life	≥8000 (25 °C±2°C,0.5C / 0.5 C, 90% DOD, 70% SOH)
Battery Configuration	416S12P
Operating Voltage	1206.4 ~1500 Vdc
Performance	
Maximum Energy Capacity	5.016 MWh
DC Power @Rated Duration	2 hours at 2.5 MW
	4 hours at 1.25 MW
General	
Dimensions	6058*2438*2900 mm
Weight	44 t
IP	IP55
Ambient Operating Temperature Range	-30 °C to 55 °C
Auxiliary Power Input	50-60 Hz
Heating and Cooling	Liquid Cooling
Safety	
Explosion Prevention and Mitigation	Gas detection with dedicated emergency safety systems including container and module ventilation and container deflagration
Fire Detection	Fire alarm panel, heat and smoke detection, alarm bell and strobe
Fire Suppression	erosol-based suppression system. Dry pipe sprinkler system.
Codes and Compliance	IEC61000, IEC62933-5-2, IEC62619, IEC60730, IEC63056, IEC62477, UL9540A, UL9540, UL1973, NFPA855,UN38.3/ UN3536



Power Conversion System-MEGAHPPS-1250K/2500K

- Rack-level management for batteries to address the issue of circulating current in parallel connections
- Modular design to prevent single point of failure
- Use of the three-level technology to achieve a maximum efficiency of 99%
- Strong environmental adaptability with C3~C5 anti-corrosion degree available, and no derating at 45°C ambient temperature
- Flexible capacity configuration and customizable MV voltage level of 6~35kV
- Multiple operation modes supported such as PQ and VSG



PRODUCT PARAMENTERS

Model	MEGAHPPS-1250K	MEGAHPPS-2500K
DC Parameters		
Number of DC Input Channels	6	12
Max. DC Current	209 A × 6	209 A × 12
DC Voltage Operating Range	1000~1500 V	
AC Parameters		
Total Rated Power	1250 kW	2500 kW
Max. Output Power	1375 kVA	2750 kVA
Rated Voltage	690 Vac	
Isolation Mode	Transformer Isolation	
Reactive Power Range	0~1312.5 kvar	0~2625 kvar
On-Grid Mode		
Rated Grid Voltage	6~35 kV (Customizable)	
Rated Grid Frequency	50 Hz / 60 Hz	
THDi	<3%	
Power Factor	-1~1	
Transformer Parameters		
Rated Capacity	1250 kVA	2500 kVA
Transformer Type	Dry-type Transformer	
LV/MV Voltage	0.69 / (6~35) kV	
System Parameters		
Dimensions (W × H × D)	6058*2896*2438 mm	
Weight	≤28 t	
Operating Temperature	-40~+60°C (Derating above 45°C)	
Operating Humidity	0~100%	
Operating Altitude	≤4000 m (No derating within 3000 m)	
IP	IP54 (PCS IP66)	
BMS Communication	RS485 / CAN	
EMS Communication	Ethernet Interface	
Communication Protocol	Modbus RTU / Modbus TCP / IEC104 / IEC61850	
Standard Compliance	GB/T 34120, IEC62477, IEC61000, EN50549	
Grid Support	H/LVRT, Frequency adjustment function, Voltage adjustment function, Inertia response, Etc.	

