

1250 kW Central PCS



Product Features	
Smart and efficient	
Three-level topology; maximum 99% efficiency	
Grid-independent V/f output, GFL/GFM VSG, and black start functions	
Fast power response, switching within 30 ms for charging/discharging at full load	
Smart connectivity	
Offers fast communication integration with a wide range of options	
Supports Modbus-RTU, Modbus-TCP, IEC 61850, and IEC 104 protocols	
Safe and reliable	
Enables grid adaptation by supporting LVRT/HVRT	
Performs active and passive fault detection	
Performs comprehensive protection measurements and automatic self-diagnosis	
Cost-effective	
Liquid cooling, high power density at low footprint	
Multiple systems can be connected in parallel for flexible capacity increase	



Model	Wattox MPCs-1250-S
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DC Side	
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Maximum DC voltage	1500 V
Operating DC voltage range	1000 – 1500 V
Maximum DC current	1403 A
Number of DC input channels	1

AC Side (Grid-connected)	
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Rated power	1250 kW @ 45°C
Maximum output power	1375 kVA @ 30°C
Rated grid voltage	690 V
Mains voltage range	621 - 759 V (standard)
Rated network frequency	50 Hz
Current THD	< 3% (reactive power)
Reactive power range	-1.05 (capacitive) ~ +1.05 (inductive)
Power factor	-1 (leading) ~ +1 (lagging)
AC connection type	3-phase, 3-wire

AC Side (Independent of the grid)	
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Rated AC voltage	690 V
Rated output frequency	50 Hz
Voltage variation	<1% (linearly balanced load)
Voltage THD	<3% (linear load)

Communication	
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Interfaces	RS485/CAN (BMS Interface), Ethernet (EMS Interface)
Protocols	Modbus-RTU, Modbus-TCP, IEC 61850, IEC 104

System	
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Maximum Efficiency	99
Cooling method	Liquid-cooled
Ambient temperature	-30°C ~ +60°C (derating >45°C)
Relative humidity	0% – 100% (non-condensing)
Cable entry direction	DC cable from the front bottom, AC cable from the front bottom
Dimensions (WxDxH)	700 × 1400 × 2300 mm
Weight	< 1300 kg
Max. operating altitude	4000 m (derating above 2000 m)
Protection class	IP65
Standards	EN-55011, IEC-61000-6-4/2, IEC62477-1, EN-50549-2

