SPPC2000
Smart Power Plant Controller

POC PT/CT Direct Sampling

PV&ESS Synergy

Fast Active/Reactive Power Response

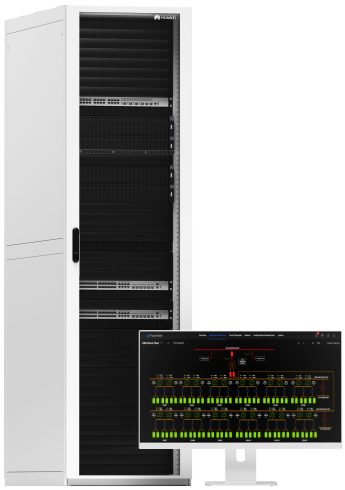
Power Oscillation Damping

Technical Specifications

Model	SPPC2000-A01	SPPC2000-A02
Device Management		
Networking Mode	Active/Standby and Master-Slave Control Mode	
Features		
Active Power Control	System-level 30ms-40ms Dynamic Reactive Power Response	
Frequency Control (P-F)	P-F Curve Control	
Reactive Power Control (Q or PF)	Reactive Power Control with Dynamic or Fixed Q/PF Setpoints	
Voltage Control (Q-U)	Q-U Curve Control	
Smart Reactive Power Compensation	System Level Dynamic Reactive Power Response Based on Inverter/Converter	
Ramp Control (Active and Reactive Power)	Control the Active/Reactive Power Up and Down Ramp Rates	
Cooperative Control of PV and ESS	Yes	
Power Oscillation Damping (POD)	Oscillation Suppression Range (0.1~2.5 Hz)	
Waveform Recording Function	Supports Instantaneous Value (0.5ms) and rms Value Recording of Current and Voltage	
Time Synchronization Function	Supports IRIGB (≤ 1 ms) and Other Time Synchronization Protocols (e.g., NTP)	
Circuit Breaker Status Acquisition and Control	Control Substations Disconnection and Connection	
Simulation Model	PSSE, DigSILENT, PSCAD	
PT/CT Sampling current	1A	5A
Communication Interface		
Ethernet	6 + 2	
Optical Ethernet	SFP x 2, 100 / 1,000 Mbps	
RS485	COM x 4	
Current/Voltage Sampling	6U + 6I	
CAN	2	
Communication Protocol	Modbus-TCP, IEC60870-5-104, GOOSE	
Interaction		
WEB	Yes	
HMI	Smart PV Management System Smart Energy Management System	
General		
Dual Power Supply	AC: 90 V~264 V, 47 Hz ~ 63 Hz, DC: 110 V ± 10%, 220 V ± 10%	
DC/AC Surge Arrester	Type II	
Dimensions (H x L x W)	1000 x 650 x 650 mm (Without Base)	
Weight	≤ 80 kg (Without Pallet and Optional Components)	
Operating Temperature Range	-25°C ~ 60°C	
Relative Humidity	0% ~ 100% (Non-condensing)	
Max. Operating Altitude	4,000 m	
Protection Degree	IP55	
Anti-corrosion Protection	C5-Medium	
Installation Options	Floor Mounting, Wall Mounting (Optional)	

Please confirm the available countries with Huawei Fusionsolar engineers

SEMS2000
Smart Energy Management System (Preliminary)



Comprehensive management

Multi-level refined management
Second-level performance curve drawing

Efficient collaboration

Power generation plan curve
PV&ESS synergy optimization

Intelligent diagnosis

Full-link multi-dimensional plant diagnosis
Cell/module fault pre-warning

Secure and reliable

IEC62443 certification.
99.99% availability

Technical Specifications

Parameter Description			
EMS cabinet			
W x D x H	600mm×2200mm×1200mm (47u)	Weight	Net weight approx. 210 kg, full configuration approx. 600 kg
Temperature	5 - 30°C	Power Supply	200V~240V, 50/60Hz
Protection Grade	IP20	Altitude	≤4000m
Server			
Model	TaiShan 200 (2280)	Hard Disk	8*1.92T SATA SSD
W x D x H	482.6mm*790mm*88.9mm. (2U)	Fans	Four hot-swappable fans in N+1 redundancy
CPU	2*Kunpeng 920 - 48core @2.6GHz	External Interface	8*GE
Database	GaussDB	Power supply	2 x 900 W, 1+1 Redundancy
Operating system	EulerOS	Net weight	Approx. 30 kg
Memory	4*64G	Certification	CCC/CE, etc.

Switches		
Model	CloudEngine S5735-S24ST4XE-V2	CloudEngine S5735-S24T4XE-V2
W x D x H	420mm*442mm*43.6mm (1U)	420mm*442mm*43.6mm (1U)
Net Weight	4.95 kg	4.34 kg
Memory	2GB	2GB
Power Supply	2*180W, 1+1 redundancy	2*180W, 1+1 redundancy
Interface	Eight gigabit electrical ports, four 10GE optical ports, and 24 gigabit optical ports	24 GE electrical ports and 4 10GE optical ports
Rated Voltage	100V AC~240V AC; 50/60Hz	100V AC~240V AC; 50/60Hz
Certification	CE/VCCI, etc.	CE/VCCI, etc.

*EMS will be available in Q1.25