

125kW–500kW

Modular C&I Energy Storage Solution

Flexible PCS / STS / MPPT Configuration



High-speed, reliable transfer

STS module enables ultra-fast transfer in <10ms for seamless switching between grid, off-grid, and diesel generator modes.



Parallel scalability

Multi-unit parallel operation enables smooth expansion up to 500kW, ideal for large C&I users and PV plants.



Integrated EMS

Local and cloud-based operation supports zero-export control and time-of-use charging/discharging strategies.



Maximized PV utilization

Dual modules support up to 240kW PV input, maximizing solar energy use for battery charging and load supply.



Integrated modular architecture

Integrates PCS, MPPT, STS, and EMS functions, with AC coupling support for all-in-one PV consumption and intelligent energy control.



Smart Energy Storage Battery System

- Remote monitoring & updates via inverter
- Low-power sleep mode
- Black start capability
- Insulation resistance test

VPM-PCS-0125



PCS Module	VPM-PCS-0125
Battery	
Battery Type	Lithium-Ion battery
Voltage Range (V)	630~1000
Max. Charge Current (A)	200
Max. Discharge Current (A)	200
Input Channels	1
AC Parameters	
Rated AC Active Power (kW)	125
Max. AC Apparent Power (kVA)	137.5
Rated Charge / Discharge Current (A)	189/181
Grid Connection	3L+N+PE
Overload Capability	1.1× continuous
Grid Voltage Range (V)	220/380 230/400 3L/N/PE
Grid Frequency Range (Hz)	50 / 60
THDi	< 3% @ Rated Power
Power Factor	-1~1
DC Parameters	
DC Voltage Range (V)	630~1000
Max. DC Current (A)	200
Interfaces	
Display	LCD
Communication Interfaces	WIFI/RS485/CAN/Meter
General	
Max. Efficiency	98%
Dimensions (mm)	543W×310H×775D
Overvoltage Level	OVC II(DC), OVC III(AC)
Weight (kg)	70
Noise (dB)	< 75
Protection Grade	IP54
Operating Temperature	-40°C to +60°C (Derating above 45°C)
Cooling Method	Intelligent air cooling
Relative Humidity	0~95%
Max. Altitude	3000m
EMC & Safety	IEC/EN 62477-1
Grid Compliance	IEC 61727, IEC 62116

VPM-PD-0120-M2Z4



MPPT Module	VPM-PD-0120-M2Z4
Input	
Max. PV Voltage (V)	950
MPPT Voltage Range (V)	250-950
Max. Current (A)	50+50+50+50
Max. Power (kW)	120
PV Inputs	2+2
Number of MPPTs	2
Full-Load Operating Voltage (V)	600-950
Output	
Voltage Range (V)	630-1000
Max. Current (A)	200
Voltage Accuracy	< 1%@100%Pn
Current Accuracy	< 1%@100%Pn
Efficiency	
Max. Conversion Efficiency	≥99%
Max. MPPT Efficiency	≥99.9%
Protection	
DC Arc Fault Protection	Supported
Surge Protection (Type II)	Supported
DC Reverse Polarity Protection	Supported
General	
Protection Grade	IP54
Max. Altitude	3000m
Cooling Method	Intelligent air cooling
Noise	<70dB
Dimensions (D × W × H)	560mmx440mm*163mm
Weight	34kg
EMC & Safety	IEC/EN 62109-1

VPM-ST5-0500-T3NN



STS Module	VPM-ST5-0250-T3NN	VPM-ST5-0500-T3NN
PCS/Grid/GEN/Load-side date		
Rated Power (kW)	250	500
Max. Current (A)	379/362	758/725
Rated Grid Voltage (VAC)	220/380V 230/400V 3L/N/PE	
Grid Connection	3L/N/PE	
Rated Grid Frequency (Hz)	50/60	
Overload Capability	1.1× continuous	
General		
Grid / Off-Grid Transfer Time	≤10ms	
Cooling Method	Natural air cooling	
Max. Altitude	3000m	
Dimensions (W × D × H)	650mm×680mm×880mm	650mm×780mm×880mm
Protection Grade	IP20	
Overvoltage Level	OVC III	
EMC & Safety	IEC/EN 61439-1/-2	