Datasheet	SPM 2500TL-HU2	SPM 3000TL-HU2	SPM 3600TL-HU2	SPM 5000TL-HU2	SPM 6000TL-HU2
Input data (DC)					
Max.PV access power	5000W	6000W	7200W	10000W	12000W
Max. recommended PV power(for module STC)	4000W	4800W	5760W	8000W	9600W
Max. DC voltage			550V		
Start voltage			70V		
MPPT voltage range			80V~525V		
No. of MPP trackers			2		
No. of PV strings per MPP tracker			1		
Max. input current per MPP tracker			18A		
Max. short-circuit current per MPP tracker			27.5A		
AC input data (AC)					
Nominal AC input power	2500W	3000W	3600W	5000W	6000W
Nominal input voltage			220V/230V/240V		
Nominal input current	10.9A	13.1A	15.7A	21.8A	26.1A
Max. grid passthrough current	12.5A	15A	18A	25A	30A
Max. generator input power			9200W		
Output data (AC)					
AC nominal power	2500W	3000W	3600W	5000W	6000W
Max. AC apparent power	2500VA	3000VA	3600VA	5000VA	6000VA
Nominal AC voltage (range*)			220V/230V/240V		
AC grid frequency (range*)			50Hz/60Hz		
Max. output current	10.9A	13.1A	15.7A	21.8A	26.1A
Adjustable power factor			0.8leading...0.8lagging		
THDi			<3%		
Battery data (DC)					
Battery voltage range			40~60V		
Max charging and discharging current	60A	70A	90A	120A	140A
Continuous charging and discharging power	2500W	3000W	3600W	5000W	6000W
Type of battery			Lithium battery/Lead-acid battery		
Backup power (AC)					
AC nominal output power	2500W	3000W	3600W	5000W	6000W
Nominal AC output voltage			220V/230V/240V		
Nominal AC output frequency			50/60Hz		
Switch time			<10ms		
Overload capability			200% Full Load@10S		
Efficiency					
Peak. efficiency			97.5%		
Europe efficiency			96.60%		
MPPT efficiency			99.0%		
Protection devices					
PV switch			Yes		
AC over current protection			Yes		
AC over voltage protection			Yes		
Ground fault monitoring			Yes		
Grid monitoring			Yes		
Anti-islanding protection			Yes		
Residual-current monitoring unit			Yes		
Insulation resistance monitoring			Yes		
AFCI protection			Optional		
Surge protection			DC Type II / AC Type II		
General data					
Max stackable number			9		
Dimensions (W / H / D)			345*450*255mm		
Weight			Gross Weight: 20kg Net Weight: 16kg		
Operating temperature range			-25~60℃, >45℃ Derating		
Topology			Transformerless		
Cooling			Smart Fan Cooling		
Protection degree			IP66		
Relative humidity			0~100%		
Altitude			< 2000m		
Display			LCD touch screen		
Interfaces: RS485/CAN/USB			Yes		
Communication			WIFI		
Warranty			5 years		
CE, IEC 62116, IEC 61683, IEC 61727, IEC 60068, NRS097, EN 61000					

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SPM 2.5-6KTL-HU2

Residential Energy Storage System
(2.5/3/3.6/5/6KW)

High Power Generation

Lower start-up voltage: 70V
Wide MPPT voltage range: 80-525V
Up to 140A charge/discharge current

Flexible Applications

Supports generator function
Supports up to 9 units in parallel
Supports DC-coupled, AC-coupled, AC-retrofit
Supports forming a 400V three-phase system

Reliable

IP66 design
Type II surge protection for DC and AC sides
AFCI, Anti-island, AC overvoltage/overcurrent protection

Enhanced Off-grid Performance

10ms
UPS function, <10ms transition
Supports 200% overload for 10 seconds

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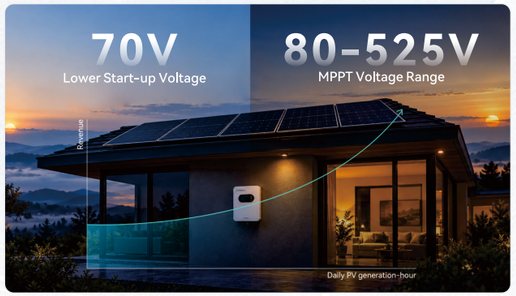
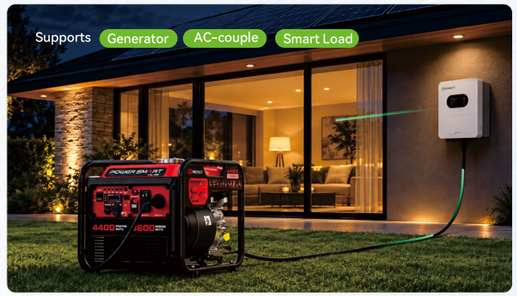
SPM 2.5-6KTL-HU2 Core Advantages

01 High-Utilization



02 Flexible Applications



03 High Reliability & Adaptation



04 Seamless Transition



05 Quick Local & Remote Firmware Updates



06 More Battery Choices



Versatile Application Functions

Self-Consumption
Store surplus solar energy for later use to maximize the solar energy self-consumption rate

Peak-Shaving
Charges as a load during low-load periods; discharges as a power source during peak-load periods.

Time of Use
Charge during off-peak hours and discharge during peak hours to arbitrage electricity rates

Back-up
Provide instant and stable backup power to critical loads during grid outages

PV-Only Backup
Supports powering backup solely with PV input, with no gird and battery

Micro-Grid
Form a resilient microgrid with PV, battery, and generator integration for off-grid or weak-grid stability

Intelligent Control & Monitoring

- Quick site setup and commissioning
- Precise operation data display
- Clear visualization of user benefits
- Efficient energy management function and interface
- On-screen interface available in 14 languages (English, Ukrainian, Urdu, etc.)



High-Utilization
Low pv startup soltage & wide MPPT range for higher energy yield & returns

Higher Safety
Lower operational risks and stable performance

Smarter Interaction
Easy commissioning and real-time monitoring

More Flexible
Support no battery mode and compatible with 3rd-party battery brands