



CATALOGUE / ENGLISH

H3-HV-300 HYBRID INVERTERS

High-power three-phase hybrid | 75 / 80 / 99 / 100 / 125 kW



300 A

Charge / discharge

165 kVA / 10s

Backup peak

PROUDLY VIETNAMESE

HOTLINE / ZALO 0898.60.3366

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H3-HV-300

High-power three-phase hybrid

300 A

165 kVA / 10s

IP66 / C4

Charge / discharge

Backup peak

Protection

01 200% PV oversizing; 300 A charge/discharge; 165 kVA peak backup for 10 seconds.

02 Up to 24 A PV input per string; observe the total limit of each MPPT.

03 Dual independent battery ports; on-grid, off-grid and parallel support.

04 Diesel generator support; 100% unbalanced and half-wave loads.

05 AI EMS with PV forecasting; dynamic pricing, ToU optimization and accurate export control.

06 Six preset operating modes.

07 IP66, C4 corrosion resistance and a 330 A contactor.

08 Transfer in under 20 ms; auto-reverse fan for dust removal.



Product models

SMR-H3-75-HV-300 / SMR-H3-80-HV-300 / SMR-H3-99-HV-300 / SMR-H3-100-HV-300 / SMR-H3-125-HV-300

H3-HV-300 | Complete specifications

Model group: SMR-H3-75-HV-300 / SMR-H3-80-HV-300 / SMR-H3-99-HV-300

Parameter	SMR-H3-75-HV-300	SMR-H3-80-HV-300	SMR-H3-99-HV-300
PV side			
Max. PV array power (kWp)	150	160	200
Battery side			
Max. charge/discharge power (kW)	75/75	80/80	100/100
Grid side (on-grid)			
Rated output power (kW)	75.0	80.0	99.0
Max. output apparent power (kVA)	75.0	80.0	99.0
Rated output current (A)	113.6/108.7/104.2	121.2/115.9/111.1	150.0/143.5/137.5
Max. output current (A)	113.6	121.2	150.0
Backup side (off-grid)			
Rated output power (kW)	75.0	80.0	99.0
Rated output current (A)	113.6/108.7/104.2	121.2/115.9/111.1	150.0/143.5/137.5

H3-HV-300 | Complete specifications

Model group: SMR-H3-100-HV-300 / SMR-H3-125-HV-300

Parameter	SMR-H3-100-HV-300	SMR-H3-125-HV-300
PV side		
Max. PV array power (kWp)	200	250
Battery side		
Max. charge/discharge power (kW)	100/100	125/125
Grid side (on-grid)		
Rated output power (kW)	100.0	125.0
Max. output apparent power (kVA)	100.0	125.0
Rated output current (A)	151.5/144.9/138.9	189.4/181.2/173.6
Max. output current (A)	151.5	189.4
Backup side (off-grid)		
Rated output power (kW)	100.0	125.0
Rated output current (A)	151.5/144.9/138.9	189.4/181.2/173.6

H3-HV-300 | Complete specifications

Shared specifications applicable to all models in this family.

Parameter	All models
PV side	
Max. PV input voltage (V) *	1000 *
Rated PV input voltage (V)	620
Start-up voltage (V)	135
MPPT operating voltage range (V) *	160 ~ 950 *
Number of MPP trackers	6
Number of strings per MPPT	3
Max. input current per MPPT (A)	48 × 6
Max. short-circuit current per MPPT (A)	60 × 6
Battery side	
Battery type	Lithium battery with BMS
Battery voltage range (V)	300 ~ 950
Number of battery inputs	1 or 2
Max. charge/discharge current (A)	300 or 150 × 2
Grid side (on-grid)	
Rated AC voltage	3L/N/PE; 220/380; 230/400; 240/415 V
Rated AC frequency (Hz)	50 / 60
Power factor	0.8 leading to 0.8 lagging
THDi at rated power	<3%
Max. input apparent power (kVA) **	207
Rated AC voltage (grid import)	3L/N/PE; 220/380; 230/400; 240/415 V
Rated AC frequency (grid import) (Hz)	50 / 60
Max. AC input current (A)	300
Backup side (off-grid)	
Peak output apparent power (kVA)	165 @10s
Rated output voltage	3L/N/PE; 220/380; 230/400; 240/415 V

Parameter	All models
Rated output frequency (Hz)	50 / 60
On/off-grid switching time (ms)	<20
THDv at linear load	<3%
Efficiency	
MPPT efficiency	99.90%
Max. efficiency	98.00%
European efficiency	97.80%
Protection	
Integrated protection	DC reverse polarity; battery input reverse connection; insulation resistance; surge protection DC: Type I+II; AC: Type II; over-temperature; residual current; anti-islanding; AC over-voltage; overload; AC short-circuit protection.
General data	
Dimensions W × H × D (mm)	1232 × 932 × 356
Weight (kg)	164
Ingress protection	IP66
Anti-corrosion degree	C4
Standby self-consumption (W)	<35
Topology	Transformerless
Operating temperature range (°C)	-30 ~ 60
Relative humidity (%)	0 ~ 100
Max. operating altitude (m)	3000
Over-voltage category	II (PV + Battery), III (Mains + Backup)
Cooling	Smart fan
Display	LED & OLED
Communication	CAN, RS485

H3-HV-300 | Conditions & notes

*: Maximum operating PV input voltage is 950 V. Operation stops at 950-1000 V; voltage above 1000 V will damage the inverter.

**: Maximum input apparent power is grid import used to supply backup loads and charge the battery.

Values apply to the exact model and configuration in each table. Dimensions are width × height × depth. Optional functions are not standard equipment.

Built around your project.

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Catalogue & datasheets | Edition 10/2026. Ratings, conditions and features are configuration-specific; this document does not replace installation manuals, certificates or batch warranty documents.