

Smart Hybrid Series



SHY-LV2048M
SHY-HV3048M

SHY-HV5048M

SHY-33HV10K48M

PARALLEL FEATURE

Parallel feature available with up to 6 units for 5KW / 10KW model only (parallel card and cable are built-in)

APPLICATIONS

- Professional Workstations
- Home Entertainment Center
- Office Equipment
- Lighting & Home Appliances



FEATURES

- Pure sine wave PV & Standalone hybrid inverter
- Programmable supply priority for PV, Battery or Grid
- Built-in internal MPPT solar charge controller
- Self-consumption and feed-in to the grid
- User-adjustable battery charging current suits different types of batteries
- Programmable operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in timer for various modes for on / off operation
- Monitoring software for real-time status display and control
- Multiple communication for USB, RS-232, Modbus and SNMP

SMART HYBRID INVERTER SPECIFICATION

MODEL	SHY-LV2048M	SHY-HV3048M	SHY-HV5048M	SHY-33HV10K48M
Phase	1-phase in / 1-phase out			3-phase in / 3-phase out
Maximum PV Input Power	2250 W	4500 W	10000 W	14850 W
Rated Output Power	2000 W	3000 W	5000 W	10000 W
Maximum Charging Power	1200 W		4800 W	9600 W
GRID-TIED OPERATION				
PV INPUT (DC)				
Nominal DC Voltage / Maximum DC Voltage	300 VDC / 350 VDC	360 VDC / 500 VDC	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	80 VDC / 120 VDC	116 VDC / 150 VDC	225 VDC / 250 VDC	320 VDC / 350 VDC
MPPT Voltage Range	120 VDC ~ 320 VDC	250 VDC ~ 450 VDC	250 VDC ~ 850 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	1 / 1 x 15 A	1 / 1 x 18 A	2 / 2 x 10 A	2 / 2 x 18.6A
GRID OUTPUT (AC)				
Nominal Output Voltage	101 / 110 / 120 / 127 VAC	208 / 220 / 230 / 240 VAC		230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	88 - 127 VAC	184 - 265 VAC		184 - 265 VAC per phase
EFFICIENCY				
Maximum Conversion Efficiency (DC / AC)	95%	96%		
European Efficiency @ Nominal V	94%	95%		
OFF-GRID OPERATION				
AC INPUT				
AC Start-up Voltage / Auto Restart Voltage	60 - 70 VAC / 85 VAC	120 - 140 VAC / 180 VAC		120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range	80 - 130 VAC	170 - 280 VAC		170 - 280 VAC per phase
PV INPUT (DC)				
Maximum DC Voltage	350 VDC	500 VDC	900 VDC	900 VDC
MPPT Voltage Range	150 VDC ~ 320 VDC	250 VDC ~ 450 VDC	250 VDC ~ 850 VDC	400 VDC ~ 800 VDC
BATTERY MODE OUTPUT (AC)				
Nominal Output Voltage	101 / 110 / 120 / 127 VAC	202 / 208 / 220 / 230 / 240 VAC	202 / 208 / 220 / 230 / 240 VAC	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (DC to AC)	90%	93%		91%
HYBRID OPERATION				
BATTERY & CHARGER (48VDC SYSTEM)				
Maximum Charging Current	Default 25A, 5A - 25A (Adjustable)		Default 60A, 5A-100A (Adjustable)	Default 60A, 10A - 200A (Adjustable)
PHYSICAL				
Dimension (D x W x H) (mm / in)	107 x 438 x 480 / 4.2 x 17.2 x 18.9		204.2 x 460 x 600 / 8.0 x 18.1 x 23.6	167.5 x 500 x 622 / 6.6 x 19.7 x 24.5
Net Weight (kg / lb)	15.5 / 34.2		29 / 63.9	45 / 99.2
INTERFACE				
Communication Port	RS-232 / USB		RS-232 / USB and CAN Interface	
Intelligent Slot	Optional SNMP, Modbus and AS-400 cards available			

Product specifications are subject to change without further notice.