

VEICHI

SI Series Off Grid/Hybrid Inverter





Pure Sine Wave Output



Programmable Supply Priority



Work with or without Battery



Convenient Design & Installation

Model Description

SIS 1 - 5K - 48 - S

Product Series

SIS: Single phase output
SIT: Three phase output

Capacity Rating

5K : 5kw(or 5kWh for battery)
1.5K : 1.5kW
3K : 3kW
.....:

Product Type

S : Off-Grid
H : Hybrid

Voltage for Battery

24 : 24V DC
48 : 48V DC
.....:

Off Grid		Hybrid	
<p>SIS-3K-24-S SIS-5K-48-S</p>		<p>SIS-3K-H SIS-5K-H</p>	
<p>SIS1-3.6K-24-S SIS1-5.6K-48-S</p>		<p>SIS1-5.6K-H SIS1-6K-H</p>	
<p>SIS2-1K-12-S</p>		<p>SIT-12K-H SIT-15K-H</p>	
<p>SIS2-3K-24-S(Plus)</p>		<p>SIT-30K-H</p>	
<p>SIS4-2K-12-S SIS4-3.2K-24-S</p>		<p>SISV-4.2K-H(TWIN) SISV-6.2K-H(TWIN)</p>	
<p>SISV-3.5K-24-S SISV-5.5K-48-S</p>		<p>SISV-8.2K-H(TWIN) SISV-10.2K-H(TWIN)</p>	

Off Grid

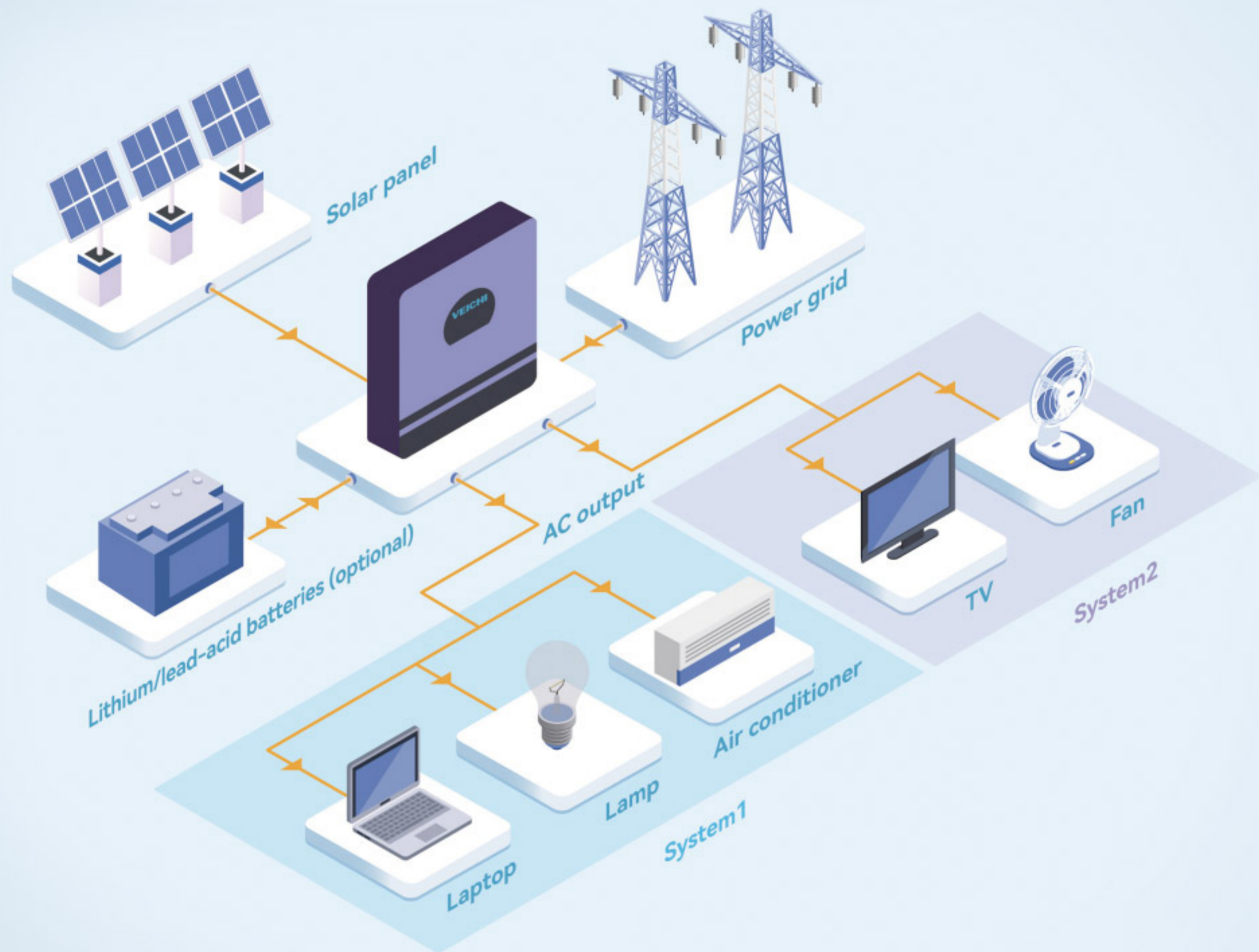
MODEL	SIS-3K-24-S	SIS-5K-48-S	SIS1-3.6K-24-S	SIS1-5.6K-48-S	SIS1-8.6K-48-S
Rated Power	3000W	5000W	3600W	5600W	8600W
INPUT					
Voltage	230VAC	230VAC	230VAC	230VAC	230VAC
Selectable Voltage Range	/	/	/	/	/
Frequency Range	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)
OUTPUT					
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	230VAC ± 5%	230VAC ± 5%	230VAC ± 5%	230VAC ± 5%
Surge Power	6000VA	10000VA	7200VA	11200VA	17200VA
Efficiency (Peak)	90%~93%	90%~93%	90%~93%	90%~93%	90%~93%
Transfer Time	"15ms (For Personal Computers) 20ms (For Home Appliances)"				
Waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Dual Outputs	Yes	Yes	No	No	No
BATTERY					
Battery Voltage	24VDC	48VDC	24VDC	48VDC	48VDC
Floating Charge Voltage	27VDC	54VDC	27VDC	54VDC	54VDC
Overcharge Protection	33VDC	63VDC	33VDC	63VDC	63VDC
SOLAR CHARGER & AC CHARGER					
Solar Charger Type	MPPT	MPPT	MPPT	MPPT	MPPT
Maximum PV Array Power	4000W	5000W	4000W	6000W	6000W
MPPT Range & Operating Voltage	120 ~ 450 VDC	120 ~ 450 VDC	120 ~ 450 VDC	120 ~ 450 VDC	120 ~ 450 VDC
Maximum PV Array Open Circuit Voltage	500VDC	500VDC	500VDC	500VDC	500VDC
Maximum Solar Charge Current	100A	100A	120A	120A	120A
Maximum AC Charge Current	100A	100A	100A	100A	100A
Maximum Charge Current	100A	100A	120A	120A	120A
PROTECTION					
Over temperature	Integrated	Integrated	Integrated	Integrated	Integrated
Battery low	Integrated	Integrated	Integrated	Integrated	Integrated
Battery high	Integrated	Integrated	Integrated	Integrated	Integrated
Output short circuit	Integrated	Integrated	Integrated	Integrated	Integrated
Output voltage too high	Integrated	Integrated	Integrated	Integrated	Integrated
Output voltage too low	Integrated	Integrated	Integrated	Integrated	Integrated
Bus voltage high	Integrated	Integrated	Integrated	Integrated	Integrated
Bus voltage low	Integrated	Integrated	Integrated	Integrated	Integrated
PV voltage is over limitation	Integrated	Integrated	Integrated	Integrated	Integrated
PHYSICAL					
Dimension, D×W×H (mm)	115×300×400	115×300×400	119×313.6×422.8	119×313.6×422.8	119×313.6×422.8
Net Weight (kgs)	9	10	10	12	12
Communication Interface	USB/RS232/RS485/WIFI/Dry-contact				
OPERATING ENVIRONMENT					
Humidity	0%~95%				
Operating Temperature	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃
Storage Temperature	-15℃ to 60℃	-15℃ to 60℃	-15℃ to 60℃	-15℃ to 60℃	-15℃ to 60℃

SIS2-1K-12-S	SIS2-3K-24-S(Plus)	SIS4-2K-12-S	SIS4-3.2K-24-S	SISV-3.5K-24-S	SISV-5.5K-48-S
1000W	3000W	1600W	3000W	3500W	5500W
230VAC	230VAC	230VAC	230VAC	230VAC	230VAC
170~280VAC(For Personal Computers) 90~280VAC (For Home Appliances)					
50Hz (Auto sensing)	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)	50Hz/60Hz (Auto sensing)
230VAC ± 5%	230VAC ± 5%	230VAC ± 5%	230VAC ± 5%	230VAC ± 5%	230VAC ± 5%
2000VA	6000VA	4000VA	6400VA	7000VA	11000VA
90%~93%	90%-93%	94%-98%	94%-98%	94%-97%	94%-97%
10ms (For Personal Computers) 20ms (For Home Appliances)					
Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
No	No	No	No	No	No
12VDC	24VDC	12VDC	24VDC	24VDC	48VDC
13.5VDC	27VDC	13.5VDC	27VDC	27VDC	54VDC
16VDC	33VDC	16VDC	33VDC	33VDC	63VDC
MPPT	MPPT	MPPT	MPPT	MPPT	MPPT
500W	1500W	2000W	3000W	5000W	6000W
30 ~ 80 VDC	30 ~ 115 VDC	30 ~ 400 VDC	30 ~ 400 VDC	120 ~ 450 VDC	120 ~ 450 VDC
102VDC	145VDC	400VDC	400VDC	500VDC	500VDC
40A	60A	80A	80A	100A	100A
20A	60A	60A	60A	80A	80A
60A	120A	80A	80A	100A	100A
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
100×255×320	100×300×440	95×273×357	95×273×357	110×310×440	110×310×440
4.4	9.5	4.6	4.8	8.5	9.5
USB/RS232		RS232/GPRS/WIFI			
5% to 95% Relative Humidity(Non-condensing)					
0℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃
5℃ to 60℃	-15℃ to 60℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃

Hybrid

MODEL	SIS-3K-H	SIS-5K-H	SIS1-5.6K-H	SIS1-6K-H	SIT-12K-H	SIT-15K-H	SIT-30K-H
Rated Output Power	3000W	5000W	5600W	6000W	12000W	15000W	30000W
GRID-TIE OPERATION							
PV INPUT (DC)							
Nominal DC Voltage / Maximum DC Voltage	360VDC / 500VDC	360VDC / 450 VDC	360VDC / 450 VDC	360VDC / 500 VDC	720VDC / 1000 VDC	720VDC / 1000 VDC	720VDC / 1000 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150VDC	120VDC / 150VDC	110VDC / 120VDC	120VDC / 150VDC	320VDC / 350VDC	320VDC / 350VDC	320VDC / 350VDC
MPPT Voltage Range	120VDC ~ 430VDC	120VDC ~ 430VDC	120VDC ~ 430VDC	120VDC ~ 430VDC	350VDC ~ 950VDC	350VDC ~ 950VDC	350VDC ~ 900VDC
Number of MPPT Trackers / Maximum Input Current	1 / 13A	1 / 23A	1 / 27A	1 / 23A	2 / A:27A, B:27A		3 / A:26A, B:26A, C:26A
GRID OUTPUT (AC)							
Nominal Output Voltage	220/230/240 VAC	220/230/240 VAC	220/230/240 VAC	220/230/240 VAC	230VAC (P-N) / 400VAC (P-P)		
Output Voltage Range	184~264.5 VAC or 195.5~253 VAC (Selectable)				184~265 VAC per phase		
Nominal Output Current	13A	21.7A	24.3A	26.1A	17.4A per phase	21.7A per phase	43.5A per phase
Power Factor	>0.99	>0.99	>0.9	>0.9	0.9 lag ~ 0.9 lead	0.9 lag ~ 0.9 lead	0.9 lag ~ 0.9 lead
EFFICIENCY							
Maximum Conversion Efficiency (DC/AC)	95%	95%	96%	95%	96%	96%	96.5%
OFF-GRID OPERATION							
AC INPUT							
AC Start-up Voltage / Auto Restart Voltage	120~140VAC / 180VAC						
Acceptable Input Voltage Range	90~280 VAC or 170~280 VAC				170~290 VAC per phase		170~280 VAC per phase
Frequency Range	50Hz/60Hz (Auto sensing)						
Maximum AC Input Current	40A	40A	40A	40A	40A	40A	50A
PV INPUT (DC)							
Maximum DC Voltage	500VDC	450VDC	450VDC	500VDC	1000VDC	1000VDC	1000VDC
MPPT Voltage Range	120VDC ~ 430VDC	120VDC ~ 430VDC	120VDC ~ 430VDC	120VDC ~ 430VDC	350VDC ~ 950VDC	350VDC ~ 950VDC	350VDC ~ 950VDC
Number of MPPT Trackers / Maximum Input Current	1 / 13A	1 / 27A	1 / 27A	1 / 27A	2 / A:27A, B:27A		3 / A:26A, B:26A, C:26A
BATTERY MODE OUTPUT (AC)							
Nominal Output Voltage	220/230/240VAC	220/230/240VAC	220/230/240VAC	220/230/240VAC	230VAC (P-N) / 400VAC (P-P)		
Output Waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Efficiency (DC to AC)	93%	93%	93%	93%	91%	91%	96%
HYBRID OPERATION							
PV INPUT (DC)							
Nominal DC Voltage / Maximum DC Voltage	360VDC / 500VDC	360VDC / 450VDC	360VDC / 450VDC	360VDC / 450VDC	720VDC / 1000 VDC	720VDC / 1000 VDC	720VDC / 1000 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC / 150VDC	120VDC / 150VDC	110VDC / 120VDC	120VDC / 150VDC	320VDC / 350VDC	320VDC / 350VDC	320VDC / 350VDC
MPPT Voltage Range	120VDC ~ 430VDC	120VDC ~ 430VDC	120VDC ~ 430VDC	120VDC ~ 430VDC	350VDC ~ 950VDC	350VDC ~ 950VDC	350VDC ~ 900VDC
Number of MPPT Trackers / Maximum Input Current	1 / 13A	1 / 27A	1 / 27A	1 / 27A	2 / A:27A, B:27A		3 / A:26A, B:26A, C:26A
GRID OUTPUT (AC)							
Nominal Output Voltage	220/230/240VAC	220/230/240VAC	220/230/240VAC	220/230/240VAC	230VAC (P-N) / 400VAC (P-P)		
Output Voltage Range	184~264.5 VAC or 195.5~253 VAC (Selectable)				184~265 VAC per phase		
Nominal Output Current	13A	21.7A	24.3A	26.1A	17.4A per phase	21.7A per phase	43.5A per phase
AC INPUT							
AC Start-up Voltage / Auto Restart Voltage	120~140VAC / 180VAC						
Acceptable Input Voltage Range	90~280 VAC or 170~280 VAC				170~290 VAC per phase		170~280 VAC per phase
Maximum AC Input Current	40A	40A	40A	40A	40A	40A	50A
BATTERY MODE OUTPUT (AC)							
Nominal Output Voltage	220/230/240VAC	220/230/240VAC	220/230/240VAC	220/230/240VAC	230VAC (P-N) / 400VAC (P-P)		
Efficiency (DC to AC)	93%	93%	93%	93%	91%	91%	96%
BATTERY & CHARGER							
Nominal DC Voltage	48VDC	48VDC	48VDC	48VDC	40VDC ~ 62VDC	40VDC ~ 62VDC	500VDC ~ 800VDC
Maximum Charge Current	60A	100A	120A	120A	250A	300A	50A
PROTECTION							
Over temperature	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Battery low	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Battery high	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output short circuit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output voltage too high	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output voltage too low	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Bus voltage high	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Bus voltage low	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV voltage is over limitation	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
GENERAL							
PHYSICAL							
Dimension, D×W×H (mm)	140×295×468	140×295×468	140×295×468	140×295×468	255×660×750	255×660×750	255×660×750
Net Weight (kgs)	11	12	12	12	70	73	73
INTERFACE							
Parallel Function	9 units	9 units	9 units	9 units	6 units	6 units	6 units
Communication Interface	USB/RS232/WIFI/Dry-contact		USB/RS232/RS485/WIFI/Dry-contact		USB/RS232/RS485/WIFI/CAN		
ENVIRONMENT							
Humidity	0% to 90% Relative Humidity (Non-condensing)				0% to 100% Relative Humidity (Non-condensing)		
Operating Temperature	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-25℃ to 60℃, >45℃ power derating		

MODEL	SISV-4.2K-H(TWIN)	SISV-6.2K-H(TWIN)	SISV-8.2K-H(TWIN)	SISV-10.2K-H(TWIN)
Rated Output Power	4200W	6200W	8200W	10200W
GRID-TIE OPERATION				
PV INPUT (DC)				
Nominal DC Voltage / Maximum DC Voltage	360VDC /500 VDC	360VDC /500 VDC	360VDC /500 VDC	360VDC /500 VDC
Start-up Voltage / Initial Feeding Voltage	60VDC / 90VDC	60VDC / 90VDC	90VDC / 120VDC	90VDC / 120VDC
MPPT Voltage Range	60VDC ~ 450VDC	60VDC ~ 450VDC	90VDC ~ 450VDC	90VDC ~ 450VDC
Number of MPPT Trackers / Maximum Input Current	1 / 18A	1 / 22A	2 / 18A	2 / 18A
GRID OUTPUT (AC)				
Nominal Output Voltage	220/230/240 VAC	220/230/240 VAC	220/230/240 VAC	220/230/240 VAC
Output Voltage Range	195.5~253 VAC	195.5~253 VAC	190~253 VAC	190~253 VAC
Nominal Output Current	18.2A	27.0A	35.6A	44.3A
Power Factor	>0.99	>0.99	>0.99	>0.99
Feed-in Grid Frequency Range	49~51 ± 1 Hz	49~51 ± 1 Hz	49~51 ± 1 Hz	49~51 ± 1 Hz
EFFICIENCY				
Maximum Conversion Efficiency (DC/AC)	98%	98%	98%	98%
TWO LOAD OUTPUT POWER				
Full Load	4200W	6200W	8200W	10200W
Maximum Main Load	4200W	6200W	8200W	10200W
Maximum Second Load (battery mode)	1400W	2067W	2733W	3400W
Main Load Cut Off Voltage	26VDC	52VDC	52VDC	52VDC
Main Load Return Voltage	27VDC	54VDC	54VDC	54VDC
OFF-GRID OPERATION				
AC INPUT				
AC Start-up Voltage / Auto Restart Voltage	120~140VAC / 180VAC	120~140VAC / 180VAC	120~140VAC / 180VAC	120~140VAC / 180VAC
Acceptable Input Voltage Range	90~280 VAC or 170~280 VAC	90~280 VAC or 170~280 VAC	90~280 VAC or 170~280 VAC	90~280 VAC or 170~280 VAC
Frequency Range	49~51 ± 1 Hz	49~51 ± 1 Hz	49~51 ± 1 Hz	49~51 ± 1 Hz
Maximum AC Input Current	30A	40A	40A	50A
PV INPUT (DC)				
Nominal DC Voltage / Maximum DC Voltage	360VDC /500 VDC	360VDC /500 VDC	360VDC /500 VDC	360VDC /500 VDC
MPPT Voltage Range	60VDC ~ 450VDC	60VDC ~ 450VDC	90VDC ~ 450VDC	90VDC ~ 450VDC
Maximum Input Current	1 / 18A	1 / 22A	2 / 18A	2 / 18A
BATTERY MODE OUTPUT (AC)				
Nominal Output Voltage	220/230/240VAC	220/230/240VAC	220/230/240VAC	220/230/240VAC
Output Waveform	Pure sine wave	Pure sine wave	Pure sine wave	Pure sine wave
Efficiency (DC to AC)	94%	94%	94%	94%
BATTERY & CHARGER				
Nominal DC Voltage	24VDC	48VDC	48VDC	48VDC
Maximum Solar Charging Current	140A	120A	160A	160A
Maximum AC Charging Current	100A	100A	140A	140A
Maximum Solar + AC Charging Current	140A	120A	160A	160A
HYBRID OPERATION				
PV INPUT (DC)				
Nominal DC Voltage / Maximum DC Voltage	360VDC /500 VDC	360VDC /500 VDC	360/500VDC	360/500VDC
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	90VDC/120VDC	90VDC/120VDC	90VDC/120VDC
MPPT Voltage Range	60VDC ~ 450VDC	60VDC ~ 450VDC	90~450VDC	90~450VDC
Maximum Input Current	1 / 18A	1 / 22A	2/18A	2/18A
GRID OUTPUT (AC)				
Nominal Output Voltage	220/230/240 VAC	220/230/240 VAC	220/230/240VAC	220/230/240VAC
Output Voltage Range	195.5~253 VAC	195.5~253 VAC	190~253VAC	190~253VAC
Nominal Output Current	18.2A	27.0A	35.6A	44.3A
AC INPUT				
AC Start-up Voltage / Auto Restart Voltage	120~140VAC / 180VAC	120~140VAC / 180VAC	120~140VAC/180VAC	120~140VAC/180VAC
Acceptable Input Voltage Range	90~280 VAC or 170~280 VAC	90~280 VAC or 170~280 VAC	90~280VAC or 170~180VAC	90~280VAC or 170~180VAC
Maximum AC Input Current	30A	40A	40A	50A
Maximum AC Charging Current	100A	100A	140A	140A
PROTECTION				
Over temperature	Integrated	Integrated	Integrated	Integrated
Battery low	Integrated	Integrated	Integrated	Integrated
Battery high	Integrated	Integrated	Integrated	Integrated
Output short circuit	Integrated	Integrated	Integrated	Integrated
Output voltage too high	Integrated	Integrated	Integrated	Integrated
Output voltage too low	Integrated	Integrated	Integrated	Integrated
Bus voltage high	Integrated	Integrated	Integrated	Integrated
Bus voltage low	Integrated	Integrated	Integrated	Integrated
PV voltage is over limitation	Integrated	Integrated	Integrated	Integrated
GENERAL				
PHYSICAL				
Dimension, D×W×H (mm)	110×350×420	110×350×420	130×390×500	130×390×500
Carton Dimension, D×W×H (mm)	180×415×500	180×415×500	205×463×588	205×463×588
Net Weight (kgs)	8	8.9	14.2	14.7
Gross Weight (kgs)	9	10	15.7	16.2
INTERFACE				
Communication Interface	RS232/RS485/GPRS/WIFI/LITHIUM BATTERY			
ENVIRONMENT				
Humidity	5% to 90% Relative Humidity (Non-condensing)			
Operating Temperature	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃	-10℃ to 50℃



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