

### Slenergy Technology GmbH

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#### Valuable

- Standardized BOM, save design time
- Quick installation, save labor cost
- Full process service, customer peace of mind

### Reliable

- Integrated design, lower failure rate
- Unified standard, higher product quality
- Active power off protection and Arc-fault circuit interrupter, safer system
- LFP Battery, stable and safe Module

The One-Stop Residential Energy Solution applies to the single-phase power grid with a voltage of 400V and a frequency of 50/60Hz. Mounting structure is tailored specifically for Pitched Roof buildings of Concrete Tile, Clay Tile or Slate Tile.



# Smart

- Real-time monitoring
- Intelligent control, intelligent detection, safe operation
- Remote upgrade, fault alarm



# Simple

- Preassembled parts, simple connection
- Packing in system, convenient for warehouse sorting

iShare Home Smart Solar Solution							
Model	iShare-Home 4kW	iShare-Home 6kW	iShare-Home 8kW	iShare-Home 10kW	iShare-Home 12kW	iShare-Home 15kW	
System capacity (kW <sub>AC</sub> )	4	6	8	10	12	15	
No. PV modules(pcs)/425W	10/12	14/16/18	20/22/24	26/28/30	32/34/36	38/40/42/44/46	
Effective Roof Area Approx.	21m <sup>2</sup> ~26m <sup>2</sup>	30m <sup>2</sup> ~39m <sup>2</sup>	43m <sup>2</sup> ~51m <sup>2</sup>	56m <sup>2</sup> ~65m <sup>2</sup>	70m <sup>2</sup> ~78m <sup>2</sup>	82m <sup>2</sup> ~100m <sup>2</sup>	
Inverter	SL-D4KTR-H25	SL-D6KTR-H25	SL-D8KTR-H25	SL-D10KTR-H25	SL-D12KTR-H25	SL-D15KTR-H40	
Battery	SL-BH-3~7 ~SL-BH-8-20						
Cable set	DC Cable:H1Z2Z2-K 1×6mm <sup>2</sup> ; UL 11627 10AWG						
	AC Cable: NYY-J 5×4mm <sup>2</sup> /5×6mm <sup>2</sup>						
	Grounding Cable: H07V-K 6mm <sup>2</sup> ; NYY 1×6mm <sup>2</sup>						
	Communication Cable: UTP CAT5e						
	Connectors						
Mounting structure set	Rail, hook kit/hanger bolt kit, rail connector, mid-clamp, end-clamp, earthing lug and other accessories					ories	
iBox	SL-BH12KR SL-BH15				SL-BH15KR		
Cloud & APP	1 set						
Power generation estimates (Italy)	15~17kWh/day 5308~4246kWh/year	20~26kWh/day 7431~9556kWh/year	29~35kWh/day	38~44kWh/day	47~52kWh/day 16984~19108kWh/year	55~67kWh/day 20169~24415kWh/yea	
	,	,	,	,	,	,	
Power generation estimates (Spain)	17~20kWh/day 6134~7360kWh/year	24~30kWh/day 8587~11040kWh/year	34~40kWh/day 12267~14721kWh/year	44~50kWh/day 15947~18401kWh/year	54~60kWh/day 19628~22081kWh/year	64~77kWh/day 23308~28215kWh/yea	

Larger capacity systems can be configured according to demand. The power generation is calculated based on Rome, Italy. The annual peak sunshine hours are 1523.

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The power generation is calculated based on Madrid, Spain. The annual peak sunshine hours are 1760h. Each 1kWh generated reduce 0.997kg of CO<sub>2</sub>.

No.of DC inputs per MPPT

Max. input current [A]

PV Modules	SL-108NA-425R						
Maximum power [Pmax/W]	425						
Open-circuit voltage [Voc/V]	37.83						
Short circuit current [lsc/A]	14.05						
Peak power voltage [Vmp/V]	31.94						
Peak power current [Imp/A]	13.31						
Temperature coefficient of short circuit current (lsc)	+0.050%/°C						
Temperature coefficient of open circuit voltage [Voc]	-0.263%/°C						
Temperature coefficient of peak power [Pmax]	-0.343%/°C						
Max. Efficiency	21.76%						
Dimension [L*W*H mm]	1722×1134×30						
Weight [kg]	21.5						
Certificate	IEC 61215, IEC 61730 ISO 9001:2015 ISO 14001:2015 ISO 45001:2018						
Warranty	Warranty 30 years linear power and 12 years material and workmanship						
Inverter							
Model	SL-D4KTR-H25	SL-D6KTR-H25	SL-D8KTR-H25	SL-D10KTR-H25	SL-D12KTR-H25	SL-D15KTR-H40	
PV Input							
Recommended Max. input power [kW]	6.0	9.0	12.0	15.0	18.0	22.5	
Start-up voltage [V]	135	135	135	135	135	135	
Max. DC input voltage* [V]	1000	1000	1000	1000	1000	1000	
Rated DC input voltage [V]	620	620	620	620	620	620	
MPPT voltage range** [V]	120-950	120-950	200-950	200-950	200-950	200-950	
No. of MPP trackers	2	2	2	2	2	2	

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Max short-circuit current [A] 20/20 20/20 20/20 20/20 20/20 40/40 Battery Side Lithium Battery (with BMS) Battery type 135~750 Battery voltage range [V] 25/25 Maximum charging/discharging current [A] 40/40 Grid Side Rated output power [kW] 4.0 6.0 8.0 10.0 12.0 15.0 Max. output apparent power [kVA] 4.4 6.6 8.8 11.0 13.2 16.5 8.0 12.0 30 Max. input apparent power\*\*\* [kVA] 16.0 16.5 16.5 Max. charging power of battery [kW] 4.0 6.0 8.0 10.0 12.0 15 Rated AC votage 3L/N/PE; 220/380V;230/400V;240/415V Rated AC frequency [Hz] 50/60 50/60 50/60 50/60 50/60 50/60 13.3 16.5 20.0 33.5 Max. output current [A] 6.7 10.0 Power factor 0.8 leading ... 0.8 lagging Max. total harmonic distortion <3% @Rated output power DCI <0.5%ln <0.5%ln <0.5%ln <0.5%ln <0.5%ln <0.5%ln Back-up side Rated output power [kW] 4.0 8.0 10.0 6.0 12.0 15.0 4.4 6.6 8.8 11.0 13.2 16.5 Max. output apparent power [kVA] 6.7 Max. output current [A] 10.0 13.3 16.5 20.0 25.0 UPS switching time <10ms <10ms <10ms <10ms <10ms <10ms Rated output voltage 3L/N/PE; 220/380V;230/400V;240/415V Rated output frequency [Hz] 50/60 50/60 50/60 50/60 50/60 50/60 Peak output apparent power\*\*\*\*[kVA] 8,60s 12,60s 16,60s 20,60s 20,60s 25,60s Voltage harmonic distortion <3% @linear load

Efficiency							
Max. Efficiency	98.10%	98.10%	98.20%	98.20%	98.20%	98.40%	
European efficiency	97.30%	97.30%	97.40%	97.40%	97.40%	97.50%	
Compliance	IEC/EN 62109, IEC/EN 61000, EN50549-1, TOR Generator Type A, VDE-AR-N-4105						
Warranty	10 years						
Protection			General Data				
DC reverse polarity protection	Integrated		Over voltage category		PV:II Main: III		
Battery input reverser connection protection	Integrated		Dimensions [W×H×D mm]		534×418×210		
	Ŭ		Weight [kg]		26kg (4-12kW)/ 31kg (15kW)		
Insulation resistance protection	Integrated		Protection Degree		IP65		
Surge protection	Integrated		Standby self-consumption [W]		<15		
Over-temperature protection	Integrated		Topology		Transformerless		
	°		Operating Temperature Range [°C]		-30~60		
Residual current protection	Integrated		Relative Humidity		0~100		
Islanding protection	Integrated		Operating Altitude		3000 (>3000m derating)		
AC over-voltage protection	Integrated		Cooling		Natural Convetion(4~12kW) / Smart Fan(15kW)		
<b>U</b> ,	°		Noise Level [dB]		<25(4~12kW) / <40(15kW)		
Overload protection	Integrated		Display		OLED&LED		
AC short-circuit protection	Integrated		Communication		CAN, RS485, WiFi/LAN(Optional)		

\*Max. operating DC voltage is 950V, max. withstanding DC voltage is 1000V

\*\*The maximum MPPT voltage and operating voltage upper limit will be reduced to 850V when inverter connects and works with battery

\*\*\*Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery

\*\*\*\*The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is related to the overload power

Battery								
Model	SL-BH-3-7	SL-BH-4-10	SL-BH-5-12	SL-BH-6-15	SL-BH-7-17	SL-BH-8-20		
European efficiency								
No. of series battery	3	4	5	6	7	8		
Rated energy [kWh]	7.68	10.24	12.8	15.36	17.92	20.48		
Usable energy [kWh]	6	9.2	11.52	13.8	16.13	18.4		
Rated voltage [V]	153.6	204.8	256	307.2	358.4	409.6		
Charge current [A]	134.4~172.8	179.2~230.4	224~288	268.8~345.6	313.6~403.2	358.4~460.8		
Rated capacity [Ah]			5					
Charge current [A]			25(Recommer	nded)/50(MAX)				
Dischage current [A]			25(Recommer	nded)/50(MAX)				
Cycle times			80% DOD, cycles >6000	), residual capacity >70	%			
Communication			RS485/RS2	32/CAN 2.0				
Protection function		Over voltage/Under voltage/Over temperature/Low temperature/Over current/Short circuit						
Size [W×D×H, mm]	710×320×639	710×320×776	710×320×913	710×320×1050	710×320×1187	710×320×1324		
Weight [kg]	118	150.8	183.6	216.4	249.2	282		
Working Conditions								
Installation			Ind	oor				
Working temperature		-10°C~50°C						
Optimum working temperature		20°C~60°C						
Storage temperature		-30°C~60°C						
Protection degree		IP54						
Humidity		5%~95%						
Altitude [m]		<2000						
Cooling		Natural						
Certificate		CE,UN38.3, MSDS, CB/EMC, IP						
Warrantyt			10 y	ears				
iBox	SL-BH12KR	SL-BH15KR	Mounting System					
DC Side			Product Name		Solar Mounting S	System		
Max input/output voltage [Voc]	1000	1000	Building Type		σ,			
Max input/output current [A]	15	15	0 //		Pitched Roof			
AC Side/Back-up	10	10	Tile Type		Concrete Tile, Clay Tile, Slate Tile			
Rated input/output voltage [VAC]	415	415	Tilt Angle		15-60°			
	20	25	Wind Load		0.52KN/m <sup>2</sup>			
Max input/output current [A]		50/60	Snow Load		0.6KN/m <sup>2</sup>			
Rated Frequency [Hz]	50/60	50/60	Applicable Solar Modu	le	Framed			
Working enviroments	40	40	Panel Layout		Portrait or Landscape			
Operation Temperature [°C]	-10 ~ +50	-10 ~ +50	i anel Layout					
Relative Humidity	98% Non condensation	98% Non condensation			EN 1991-1-1: 2			
Altitudes [m]	≤2000m	≤2000m	Design Standard		UNE EN1991-1-3	3-2018		
Protection degree	IP54	IP54			UNE EN 1991-1-4	4-2018		
Installation methods	Indoor, Hanging	Indoor, Hanging	Main Material		AL6005-T6(Anodized)			
Standards & Certifications			Fastener	CI II	S304 & Zinc-Nickel Alloy			
Standards	IEC61439-1, IEC61439-2	IEC61439-1, IEC61439-2		30.				
Certifications	CE	CE	Small Components		AL6005-T6(Anodized)			
Dimensions [W×H×D mm]	475×425×175	475×425×175	Color		Silver and black			
Weight [kg]	18	20	Certificate		TUV			
-		ears	Warranty		10 years			