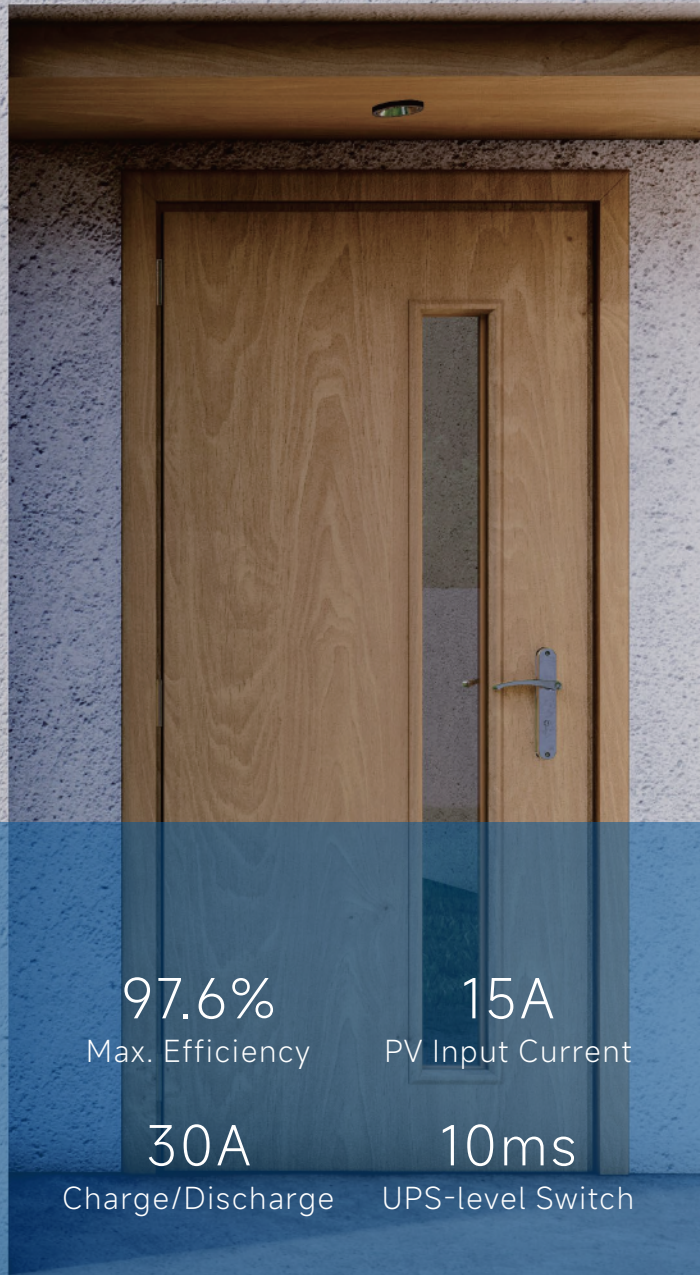


# 3-8 kW Hybrid Inverter

SL-D3/3.6/4.2/5/6/8KTL-H30

Residential | Single-Phase | HV Battery



97.6%  
Max. Efficiency

15A  
PV Input Current

30A  
Charge/Discharge

10ms  
UPS-level Switch

1

## Optimal Power & Storage

- 97.6% Max. Efficiency
- 15A PV input current per string, 1-2 MPP trackers
- 30A charge/discharge current

2

## Strong Load & Back-up

- 110% continuous AC output overloading
- 130% max. back-up output overloading @60s
- 160% DC oversizing

3

## Convenient Installation & Operation

- Plug & Play terminals for easy wiring
- Slenergy O-light, power and alarm indicator
- OLED display and App for setting and data management

4

## Flexible Design & Use

- 85-450V wide battery voltage range
- IP65 for indoor and outdoor installation
- Compact size and elegant appearance

Model	SL-D3KTL-H30	SL-D3.6KTL-H30	SL-D4.2KTL-H30	SL-D5KTL-H30	SL-D6KTL-H30	SL-D8KTL-H30
<b>PV Input</b>						
Recommended Max. input power (kW)	4.80	5.76	6.72	8.00	9.60	12.80
Start-up voltage (V)	80	80	80	80	80	80
Max. DC input voltage* (V)	600	600	600	600	600	600
Rated DC input voltage (V)	360	360	360	360	360	360
MPPT voltage range** (V)	100-550	100-550	100-550	100-550	100-550	100-550
No. of MPP trackers	1	1	2	2	2	2
No. of DC inputs per MPPT	1	1	1/1	1/1	1/1	1/1
Max. input current (A)	15	15	15/15	15/15	15/15	15/15
Max. short-circuit current (A)	20	20	20/20	20/20	20/20	20/20
<b>Battery Side</b>						
Battery type	Lithium Battery (with BMS)					
Battery voltage range (V)	85-450					
Maximum charging/discharging current (A)	30/30					
<b>Grid side</b>						
Rated output power (kW)	3.00	3.60	4.20	5.00	6.00	8.00
Max. output apparent power (kVA)	3.30	3.96	4.60	5.50	6.60	8.00
Max. input apparent power*** (kVA)	6.00	7.20	8.40	10.00	10.00	12.00
Max. charging power of battery (kW)	3.00	3.60	4.20	5.00	6.00	8.00
Rated AC voltage	L/N/PE: 220/230/240V					
Rated AC frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Max. output current (A)	15.00	18.00	21.00	25.00	28.70	36.30
Power factor	0.8 leading ...0.8 lagging					
Max. total harmonic distortion	<3% @Rated output power					
DCI	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In	<0.5%In
<b>Back-up Side</b>						
Rated output power (kW)	3.00	3.60	4.20	5.00	6.00	8.00
Max. output apparent power (kVA)	3.30	3.96	4.60	5.50	6.60	8.00
Max. output current (A)	15.00	18.00	21.00	25.00	28.70	36.30
UPS switching time	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
Rated output voltage	L/N/PE:220/230/240V					
Rated output frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60
Peak output apparent power (kVA)****	3.9, 60s	4.7, 60s	5.5, 60s	6.5, 60s	7.8, 60s	10, 60s
Voltage harmonic distortion	<3% @Linear load					
<b>Efficiency</b>						
Max. efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
European efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%

Protection	
DC reverse polarity protection	Integrated
Battery input reverse connection protection	Integrated
Insulation resistance protection	Integrated
Surge protection	Integrated
Over-temperature protection	Integrated
Residual current protection	Integrated
Islanding protection	Integrated
AC over-voltage protection	Integrated
Overload protection	Integrated
AC short-circuit protection	Integrated

General Data	
Over voltage category	PV: II Main: III
Dimensions (WxHxD mm)	534x418x210
Weight (kg)	27.0
Protection degree	IP65
Standby self-consumption (W)	<15
Topology	Transformerless
Operating Temperature Range (°C)	-30-60
Relative Humidity (%)	0-100
Operating Altitude (m)	3000(>3000m derating)
Cooling	Natural Convection
Noise Level (dB)	<25
Display	OLED & LED
Communication	CAN.RS485.WiFi/LAN (Optional)

\* Max. operating DC voltage is 550V, max. withstanding DC voltage is 600V

\*\*The maximum MPPT voltage and operating voltage upper limit will be reduced to 520 V 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

1) G98: 3.68kVA; 2) G98: 16.00A; 3) AS 4777.2: 5.0kW, VDE-AR-N 4105: 4.6kW; 4) AS 4777.2: 5.0kVA, VDE-AR-N 4105: 4.60kVA, C10/11: 5.0kVA;

5AS 4777.2: 21.7A, VDE-AR-N 4105: 21.0A, C10/11: 21.7A;