



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
PV Input						
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
Battery Side						
Battery type	Lithium Battery (with BMS)					
Battery voltage range (V)	85-450					
Maximum charging/discharging current (A)	30/30					
Grid side						
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
Back-up Side						
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
Voltage harmonic distortion	<3% @Linear load					
Efficiency						
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)

* PV Max. Input voltage is 550V without battery, or 500V with battery, otherwise inverter will be waiting;

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

1)G98: 3.68A; 2) G98: 16.00A; 3) AS 4777.2: 50kW, VDE-AR-N 4105: 4.6kW; 4) AS 4777.2: 5.0kVA, VDE-AR-N 4105: 4.60kVA; C10/11: 5.0kVA;

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