

Hybrid Inverter SL-D10-20KTR-H40

Commercial | Three phase | HV Battery | 2 MPPTs

98.4%

Max. Efficiency

40A

PV Input Current

10ms

UPS-level Switching

110%

Unbalanced Load



1

Optimal Power & Storage

- 98.4% Max. Efficiency
- 30A PV input current, 2 MPP trackers
- 110% Unbalanced Output
- 40A charge/discharge current

2

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
- WIFI configuration via App

3

Strong Load & Back-up

- 110% continuous AC output overloading
- 200% max. back-up output overloading @60s
- 10ms UPS-level switching
- 150% DC oversizing

4

Flexible Design & Use

- 135-750V wide battery voltage range
- IP65 for indoor and outdoor installation
- Support paralleling up to 10 devices
- Compact size and elegant appearance

	SL-D10KTR-H40	SL-D12KTR-H40	SL-D15KTR-H40	SL-D20KTR-H40
PV Input				
Max. Input power (kW)	15	18	22.5	30
Max. DC input Voltage* (V)	1000*			
MPPT voltage range* (V)	200-950*			
Start-up voltage (V)	135			
Rated input voltage (V)	620			
Max. input current per MPPT (A)	30/30			
Max. short-circuit current (A)	40/40			
Number of MPP trackers	2			
Max. number of inputs	2/2			
Battery Side				
Battery Type	Lithium Battery (with BMS)			
Battery Voltage Range (V)	135-750			
Max. Charging/Discharging Current (A)	40/40			
Grid Side				
Rated output power (kW)	10	12	15	20
Max. Output Apparent Power (kVA)	11.0 ¹⁾	13.2	16.5 ³⁾	22
Max. Input Apparent Power ** (kVA)	20	24	30	30
Max. Charging Power of battery (kW)	10	12	15	20
Rated output voltage (V)	3L/N/PE; 220/380; 230/400; 240/415			
Rated AC grid frequency (Hz)	50/60			
Max. output current (A)	16.5 ²⁾	20	25.0 ⁴⁾	33.5
Adjustable power factor	0.8 leading ...0.8 lagging			
Max. total harmonic distortion	<3% @Rated output power			
DCI	<0.5%In			
Back-up Side				
Rated output power (kW)	10	12	15	20
Max. Output Apparent Power (kVA)	11	13.2	16.5	22
Max. output current (A)	16.5	20	25	33.5
UPS switching time (ms)	<10	<10	<10	<10
Rated output voltage (V)	3L/N/PE; 220/380; 230/400; 240/415			
Rated output frequency (Hz)	50/60	50/60	50/60	50/60
Voltage harmonic distortion	<3% @Linear load			
Efficiency				
Max. efficiency	98.40%			
European Efficiency	97.50%			
Compliance	IEC/EN 62109, IEC/EN 61000, EN50549-1, TOR Generator Type A, VDE-AR-N-4105			

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 (W×H×D mm)	534×418×210
Weight (kg)	28.0 (10-12kW)/31.0 (15-20kW)
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	Smart Fan
Noise Level (dB)	<40
Display	OLED & LED
Communication	CAN, RS485, WIFI/LAN (Optional)

* PV Max. Input voltage is 950V without battery, or 850V 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 loads and charge the battery;

1) G98: 10.5kVA; 2) G98: 16.00A; 3) AS 4777.2: 15.0kVA; 4) AS 4777.2: 21.7A