ETEK

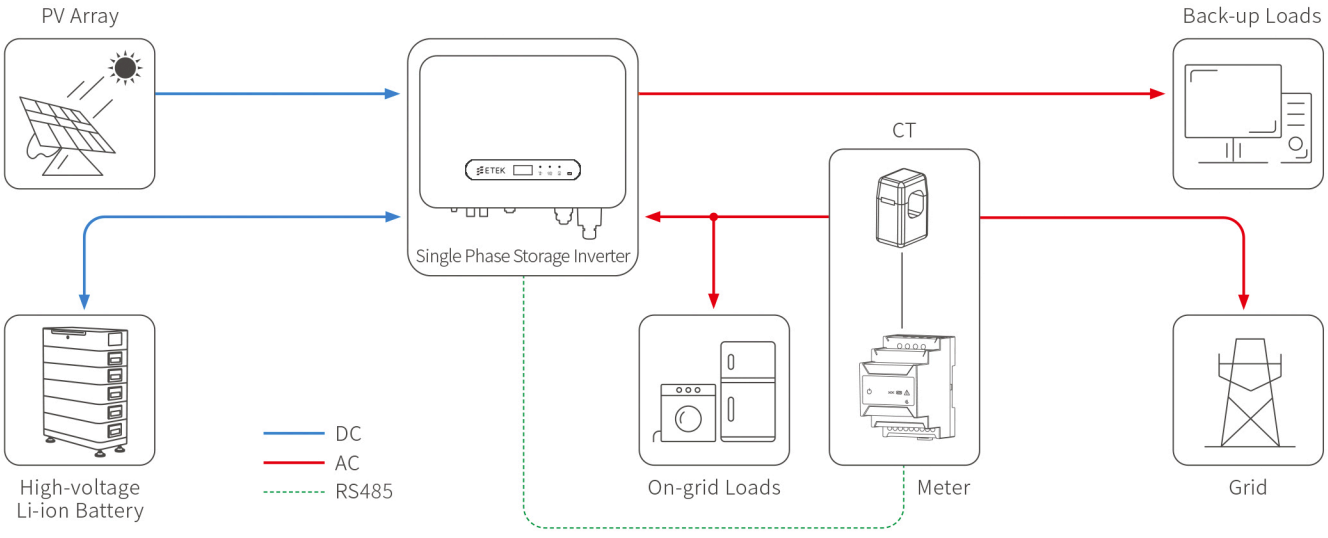
ETEK Single Phase Storage Inverter with Two MPPT

ETH-3K~3.6KTL-HSS / ETH-4.2K~8KTL-HS

MAX 97.6% EFFICIENCY

IP65 PROTECTION

- Max. effiency up to 97.6%
  Max. 30A charge/discharge current
- With AC output ranging from 3kW to 8kW
- Powerful load adaptability, support multiple loads stable access
- Fast and easy data checking and commissioning via App or OLED display
- Wide battery voltage range allows more battery modules connection and increases self consumption rate.
- Fast charging/discharging of up to 30A to meet the demand of higher consumption and energy trading.
- Up to 15A maximum PV input current allows most higher current PV panels connection and lowers the system LCOE.
- Uninterruptible power supply, switch to off-grid modve within 10ms



TECHNICAL PARAMETERS

SINGLE PHASE: ETH-3K~3.6KTL-HSS/ETH-4.2K~8KTL-HS

Type Designation	ETH-3KTL -HSS	ETH-3.6KTL -HSS	ETH-4.2KTL -HS	ETH-5KTL -HS	ETH-6KTL -HS	ETH-7KTL -HS	ETH-8KTL -HS
PV Input							
Max. Input Power (kW)	4.80	5.76	6.72	8.00	9.60	11.20	12.80
Start-up Voltage (V)	80	80	80	80	80	80	80
Max. DC Input Voltage (V)*	600	600	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360	360	360
MPPT Voltage Range (V)	100-550	100-550	100-550	100-550	100-550	100-550	100-550
No. of MPP Trackers	1	1	2	2	2	2	2
No. of DC Inputs per MPPT	1	1	1/1	1/1	1/1	1/1	1/1
Max. Input Current (A)	15	15	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	20/20
Battery Side							
Battery Type	Lithium Battery (with BMS)						
Battery Voltage Range (V)	65-450						
Max. Charge/Discharge Current (A)	30/30						
Grid Side							
Rated Output Power (kW)	3.00	3.60	4.20	5.00[3]	6.00	7.00	8.00
Max. Output Apparent Power (kVA)	3.30	3.96[1]	4.60	5.50[4]	6.60	7.70	8.00
Max. Input Apparent Power (kVA)**	6.00	7.20	8.40	10.00	12.00	12.00	12.00
Max. Charging Power of Battery (kW)	3.00	3.60	4.20	5.00	6.00	7.00	8.00
Rated AC Voltage (V)	L/N/PE; 220/230/240V						
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Max. Output Current (A)	15.00	18.00[2]	21.00	25.00[5]	28.70	35.00	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	<0.5%In
Back-up Side							
Rated Output Power (kW)	3.00	3.60	4.20	5.00	6.00	7.00	8.00
Max. Output Apparent Power (kVA)	3.30	3.96	4.60	5.50	6.60	7.70	8.00
Max. Output Current (A)	15.00	18.00	21.00	25.00	28.70	35.00	36.30
UPS Switching Time	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
Rated Output Voltage (V)	3/N/PE; 220/380V; 230/400V; 240/415V						
Rated Output Frequency (Hz)	50/60	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	9.1, 60s	10, 60s
Voltage Harmonic Distortion	<3% @Linear load						
Efficiency							
Max. Efficiency	97.6%	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%	97.0%
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 (Frequency shift)
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)	27.0
Protection Degree	IP65
Standby Self-consumption (W)	<15
Topology	Transformerless
Operating Temperature Range (℃)	-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 600V, max. withstanding DC voltage is 550V*

*** 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;

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