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New Epoch , New Energy

WORK TOGETHER  
FOR A WIN-WIN

## New Beginning

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Renewable energy,energy saving  
and environment friendly,let us  
with Epoch for a better future.



Power Your Car



# E-Star-EH1

RESIDENTIAL SERIES



## POWER

8/10/12kW inverter

## CAPACITY

Battery modular design  
Power capacity expandable



## Multi-protection

Input Reverse Polarity/Anti-island  
Over-heat/AC Overcurrent  
AC Short-circuit/AC Overvoltage  
DC Surge/AC Surge Protection



PV MPPT Voltage Range 180V~850V  
Support GPRS/WIFI/RS485/USB  
PV overload capability up to 130%

Model	ESI-8KW-H3	ESI-10KW-H3	ESI-12KW-H3
<b>PV Input Data</b>			
Maximum input power (kW)	10.4	13	15.6
Maximum input voltage (V)	1000		
MPPT operating voltage range (V)	180~850V		
Number of MPPT /strings per MPPT	2/1		
Maximum input current (A)	12.5/12.5		
MPPT Efficiency	99.50%		
Maximum efficiency	97.9%	98.2%	98.2%
Battery efficiency	97.20%		
Euro Efficiency	97.2%	97.5%	97.5%
<b>AC parameters (Grid tie )</b>			
Rated power (kw)	8.8	11	13.2
Maximum apparent power (kVA)	8.8	11	13.2
Rated Voltage(Vac)	3L+N+PE,230/400V		
Rated frequency(Hz)	50/60		
Maximum output current (A)	12.7	15.9	19.1
Power factor range	0.8 leading ~ 0.8 lagging		
Current Total Harmonic Distortion (@rated power)	<3%		
<b>AC output parameters (Off grid )</b>			
Maximum apparent output power (kVA)	8.8	11	13.2
Rated output voltage (Vac)	3W+N+PE,230/400V		
Rated output frequency (Hz)	50/60		
Maximum output current (A)	12.7	15.9	19.1
Auto switch time (ms)	<20		
Overload capacity	110%,30S/120%,10S/150%,0.02S		
<b>Battery Pack Data</b>			
Battery pack model	ES-256V32AH		
Cell type	Li-ion(LFP)		
Rated voltage (V)	256		
Operating voltage range (V)	240~288V		
Battery Capacity(Ah)	32		
Storage Capacity (kWh)	8.2/16.4/24.6/32.8/41/49.5		
cycle life	10000*		
<b>Battery Output Data</b>			
Maximum charging voltage (V)	600		
Battery Voltage Range(V)	125~600V		
Full load battery voltage (V)	210	270	250
Rated charge / discharge current (A)	40		50
Communication Interface	CAN		
<b>General Data</b>			
working temperature range	-25~60°C		
Working altitude (m)	No derating below 2000m		
Noise Figure (dB)	<35		
Topology	Transformerless		
cooling method	Non-Isolated		
Protection class	IP65		
Humidity	0~95%		
Human-computer interaction	LCD		
Communication	CAM/RS485/DRM/WIFI (optional) /4G (optional)		
Dimensions(w*D*H)(mm)	530* 200* 600		
Warranty	5 years (optional 10 years)		
Weight(kg)	140/215/285/360/435/510		
<b>Certification</b>			
Certificates	VDE-AR-N 4105EN/IEC 61000-1/-2/-3/-4,IEC61000-3-11/12,UN38-3 VDE-AR-N 2510-50,IEC/EN 62109-1,IEC 62619,EN 50549,CEI 0-21,CE		

# E-Star-EL1

RESIDENTIAL SERIES



## POWER

3/4/5kW inverter

## CAPACITY

Battery modular design  
Power capacity expandable



## Multi-protection

Input Reverse Polarity/Anti-island  
Over-heat/AC Overcurrent  
AC Short-circuit/AC Overvoltage  
DC Surge/AC Surge Protection



PV MPPT Voltage Range 120V~550V  
Support GPRS/WIFI/RS485/USB  
PV overload capability up to 130%

Model	ESI-3KW-L1	ESI-4KW-L1	ESI-5KW-L1
<b>PV Input Data</b>			
Maximum input power (kW)	4.6	6	7
Maximum input voltage (V)		500	
MPPT operating voltage range (V)		120~550V	
Number of MPPT /strings per MPPT		2/1	
Maximum input current (A)		14/14	
MPPT Efficiency		99.90%	
Maximum efficiency		97.60%	
Battery efficiency		97.20%	
Euro Efficiency		97.00%	
<b>AC parameters (Grid tie )</b>			
Rated power (kw)	3	4	5
Maximum apparent power (kVA)	3	4	5
Rated Voltage(Vac)		L+N+PE,230/176 ~270	
Rated frequency(Hz)		50/60	
Maximum output current (A)	13	17.4	21.7
Power factor range		0.8 leading ~ 0.8 lagging	
Current Total Harmonic Distortion (@rated power)		<3%	
<b>AC output parameters (Off grid )</b>			
Maximum apparent output power (kVA)	3	4	5
Rated output voltage (Vac)		L+N+PE,230	
Rated output frequency (Hz)		50/60	
Maximum output current (A)	13	17.4	21.7
Auto switch time (ms)		<20	
Overload capacity		110%,30S/120%,10S/150%,0.02S	
<b>Battery Pack Data</b>			
Battery pack model		ES-H48100	
Cell type		Li-ion(LFP)	
Battery Capacity(Ah)		100	
Storage Capacity (kWh)		5	
cycle life		7000*	
Operating voltage range (V)		44~57.6V	
Rated voltage (V)		51.2	
<b>Battery Output Data</b>			
Maximum charging voltage (V)		58	
Battery Voltage Range(V)		40~58V	
Rated charge / discharge current (A)	95/62.2	95/83.3	95/104.2
Communication Interface		CAN	
<b>General Data</b>			
working temperature range		-25~60°C	
Working altitude (m)		No derating below 2000m	
Noise Figure (dB)		<35	
Topology		Transformerless	
cooling method		Natural Convection	
Protection class		IP65	
Humidity		0~95%	
Human-computer interaction		LCD	
Meter communication mode		CAN/RS485	
Dimensions(w*D*H)(mm)		550* 200* 515	
Warranty		5 years (optional 10 years)	
Weight(kg)		130	
<b>Certification</b>			
Certificates	VDE-AR-N 4105EN/IEC 61000-1/-2/-3/-4,IEC61000-3-11/12,UN38-3 VDE-AR-N 2510-50,IEC/EN 62109-1,IEC 62619,EN 50549,CEI 0-21,CE		

# E-Star-EH2

RESIDENTIAL SERIES



## POWER

3/5/6kW inverter

## CAPACITY

Battery modular design  
Power capacity expandable



## Multi-protection

Input Reverse Polarity/Anti-island  
Over-heat/AC Overcurrent  
AC Short-circuit/AC Overvoltage  
DC Surge/AC Surge Protection



PV MPPT Voltage Range 120V~550V  
Support GPRS/WIFI/RS485/USB  
PV overload capability up to130%

Model	ESI-3KW-H1	ESI-5KW-H1	ESI-6KW-H1
<b>PV Input Data</b>			
Maximum input power (kW)	4.5	7.5	9
Maximum input voltage (V)		600	
MPPT operating voltage range (V)		120~550V	
Number of MPPT /strings per MPPT		2/1	
Maximum input current (A)		13.5/13.5	
MPPT Efficiency		99.90%	
Maximum efficiency	97.42%	97.50%	97.50%
Max. Battery Discharge Efficiency	97.15%	97.50%	97.50%
Euro Efficiency	97.15%	97.20%	97.20%
<b>AC parameters (Grid tie )</b>			
Rated power (kW)	3	5	6
Maximum apparent power (kVA)	3	5	6
Rated Voltage(Vac)		220 /230/240; 160 ~ 290	
Rated frequency(Hz)		50/60±5	
Maximum output current (A)	21.7		26.1
Power factor range		0.8 leading ~ 0.8 lagging	
Current Total Harmonic Distortion (@rated power)		<2%	
<b>AC output parameters (Off grid end )</b>			
Rated output power (kW)	3	5	6
Maximum apparent output power (kVA)	3	5	6
Rated output voltage (Vac)		220 /230/240; 160 ~ 290	
Rated output frequency (Hz)		50/60±5	
Maximum output current (A)	13	21.7	26.1
<b>Battery Pack Data</b>			
Battery pack model		ES-H48100	
Cell type		Li-ion(LFP)	
Battery Capacity(Ah)		100	
Storage Capacity(kWh)		10	
cycle life		7000*	
Rated voltage (V)		51.2	
<b>Battery Output Data</b>			
Battery Type		Lithium or Lead-acid	
Battery Voltage Range (V)		80~450V	
Max. Charging / Discharging Current (A)		25	
Max. Charging / Discharging Power (kW)	4.5/3	6/5	6/6
Communication Interface		CAN	
<b>General Data</b>			
working temperature range		-25~60°C	
Working altitude (m)		<2000	
Noise Figure (dB)		<35	
Topology		Transformerless	
cooling method		Natural Convection	
Protection class		IP65	
Humidity		0 ~ 95%	
Human-computer interaction		LCD	
Meter communication mode		RS485	
Dimensions(w*D*H)(mm)		520* 380* 1200	
Warranty		5 years (optional 10 years)	
Weight(kg)		120	
<b>Certification</b>			
Certificates	VDE-AR-N 4105EN/IEC 61000-1/-2/-3/-4,IEC61000-3-11/12,UN38-3		
	VDE-AR-N 2510-50,IEC/EN 62109-1,IEC 62619,EN 50549,CEI 0-21,CE		

# E-Star-EL2

RESIDENTIAL SERIES



## POWER

3/3.68/5kW inverter

## CAPACITY

Battery modular design  
Power capacity expandable



## Multi-protection

Input Reverse Polarity/Anti-island  
Over-heat/AC Overcurrent  
AC Short-circuit/AC Overvoltage  
DC Surge/AC Surge Protection



PV MPPT Voltage Range 100V~550V  
Support GPRS/WIFI/RS485/USB  
PV overload capability up to 130%



Model	ESI-3KW-L1	ESI-3.68KW-L1	ESI-5KW-L1
<b>PV Input Data</b>			
Maximum input power (kW)	3.9	4.6	6.5
Maximum input voltage (V)		580	
MPPT operating voltage range (V)		100~550V	
Number of MPPT /strings per MPPT		2/1	
Maximum input current (A)		12/12	
MPPT Efficiency		99.90%	
Maximum efficiency		97.60%	
Battery Charge/Discharge efficiency		94.00%	
Euro Efficiency		97.00%	
<b>AC parameters (Grid tie )</b>			
Rated power (kW)	3	3.68	5
Maximum apparent power (kVA)	3	3.68	5
Rated Voltage(Vac)		220 /230; 180 ~ 270	
Rated frequency(Hz)		50/60±5	
Maximum output current (A)	13	16	21.7
Power factor range		0.8 leading ~ 0.8 lagging	
Current Total Harmonic Distortion (@rated power)		<3%	
<b>AC output parameters (Off grid end )</b>			
Rated output power (kW)	3	3.68	5
Maximum apparent output power (kVA)	3	3.68	5
Rated output voltage (Vac)		220 /230; 180 ~ 270	
Rated output frequency (Hz)		50/60±5	
Maximum output current (A)	13	16	21.7
<b>Battery Pack Data</b>			
Battery pack model		ES-H48100	
Cell type		Li-ion(LFP)	
Battery Capacity(Ah)		100	
Storage Capacity(kWh)		5	
cycle life		7000*	
Operating voltage range (V)		51.2~57.6V	
Rated voltage (V)		51.2	
<b>Battery Output Data</b>			
Battery Type		Lead-acid battery/lithium battery	
Battery Voltage Range(V)		40-60V	
Max. Charging / Discharging Power(kW)		3	
Max. Charging / Discharging Current(A)		60A	
Communication Interface		CAN	
<b>General Data</b>			
working temperature range		-25~60°C	
Working altitude (m)		<4000	
Noise Figure (dB)		<35	
Topology		Transformerless	
cooling method		Natural Convection	
Protection class		IP65	
Humidity		0 ~ 95%	
Human-computer interaction		LCD	
Meter communication mode		RS485	
Dimensions(w*D*H)(mm)		520* 380* 1200	
Warranty		5 years (optional 10 years)	
Weight(kg)		120	
<b>Certification</b>			
Certificates	VDE-AR-N 4105EN/IEC 61000-1/-2/-3/-4,IEC61000-3-11/12,UN38-3		
	VDE-AR-N 2510-50,IEC/EN 62109-1,IEC 62619,EN 50549,CEI 0-21,CE		

# E-Star-EH3

RESIDENTIAL SERIES



## POWER

3/5/6kW inverter

## CAPACITY

Battery modular design  
Power capacity expandable



## Multi-protection

Input Reverse Polarity/Anti-island  
Over-heat/AC Overcurrent  
AC Short-circuit/AC Overvoltage  
DC Surge/AC Surge Protection



PV MPPT Voltage Range 120V~550V  
Support GPRS/WIFI/RS485/USB  
PV overload capability up to 130%

Model	ESI-3KW-H1	ESI-5KW-H1	ESI-6KW-H1
<b>PV Input Data</b>			
Maximum input power (kW)	4.5	7.5	9
Maximum input voltage (V)	600		
MPPT operating voltage range (V)	120~550V		
Number of MPPT /strings per MPPT	2/1		
Maximum input current (A)	13.5/13.5		
MPPT Efficiency	99.90%		
Maximum efficiency	97.42%	97.50%	97.50%
Max. Battery Discharge Efficiency	97.15%	97.50%	97.50%
Euro Efficiency	97.15%	97.20%	97.20%
<b>AC parameters (Grid tie )</b>			
Rated power (kW)	3	5	6
Maximum apparent power (kVA)	3	5	6
Rated Voltage(Vac)	220 /230/240; 160 ~ 290		
Rated frequency(Hz)	50/60±5		
Maximum output current (A)	13	21.7	26.1
Power factor range	0.8 leading ~ 0.8 lagging		
Current Total Harmonic Distortion (@rated power)	<2%		
<b>AC output parameters (Off grid end )</b>			
Rated output power (kW)	3	5	6
Maximum apparent output power (kVA)	3	5	6
Rated output voltage (Vac)	220 /230/240; 160 ~ 290		
Rated output frequency (Hz)	50/60±5		
Maximum output current (A)	13	21.7	26.1
<b>Battery Pack Data</b>			
Battery pack model	ES-H48100		
Cell type	Li-ion(LFP)		
Battery Capacity(Ah)	100		
Storage Capacity(kWh)	10		
cycle life	7000*		
Rated voltage (V)	51.2		
<b>Battery Output Data</b>			
Battery Type	Lithium or Lead-acid		
Battery Voltage Range (V)	80~450V		
Max. Charging / Discharging Current (A)	25		
Max. Charging / Discharging Power (kW)	4.5 /3	6/5	6 /6
Communication Interface	CAN		
<b>General Data</b>			
working temperature range	-25~60°C		
Working altitude (m)	<2000		
Noise Figure (dB)	<35		
Topology	Transformerless		
cooling method	Natural Convection		
Protection class	IP65		
Humidity	0 ~ 95%		
Human-computer interaction	LCD		
Meter communication mode	RS485		
Dimensions(w*D*H)(mm)	520* 380* 1300		
Warranty	5 years (optional 10 years)		
Weight(kg)	130		
<b>Certification</b>			
Certificates	VDE-AR-N 4105EN/IEC 61000-1/-2/-3/-4,IEC61000-3-11/12,UN38-3		
	VDE-AR-N 2510-50,IEC/EN 62109-1,IEC 62619,EN 50549,CEI 0-21,CE		

# E-Star-EL3

RESIDENTIAL SERIES



## POWER

3/3.68/5kW inverter

## CAPACITY

Battery modular design  
Power capacity expandable



## Multi-protection

Input Reverse Polarity/Anti-island  
Over-heat/AC Overcurrent  
AC Short-circuit/AC Overvoltage  
DC Surge/AC Surge Protection



PV MPPT Voltage Range 100V~550V  
Support GPRS/WIFI/RS485/USB  
PV overload capability up to 130%

Model	ESI-3KW-L1	ESI-3.68KW-L1	ESI-5KW-L1
<b>PV Input Data</b>			
Maximum input power (kW)	3.9	4.6	6.5
Maximum input voltage (V)	580		
MPPT operating voltage range (V)	100-550V		
Number of MPPT /strings per MPPT	2/1		
Maximum input current (A)	12/12		
MPPT Efficiency	99.90%		
Maximum efficiency	97.60%		
Battery Charge/Discharge efficiency	94.00%		
Euro Efficiency	97.00%		
<b>AC parameters (Grid tie )</b>			
Rated power (kW)	3	3.68	5
Maximum apparent power (kVA)	3	3.68	5
Rated Voltage(Vac)	220 /230; 180 ~ 270		
Rated frequency(Hz)	50/60±5		
Maximum output current (A)	13	16	21.7
Power factor range	0.8 leading ~ 0.8 lagging		
Current Total Harmonic Distortion (@rated power)	<3%		
<b>AC output parameters (Off grid end )</b>			
Rated output power (kW)	3	3.68	5
Maximum apparent output power (kVA)	3	3.68	5
Rated output voltage (Vac)	220 /230; 180 ~ 270		
Rated output frequency (Hz)	50/60±5		
Maximum output current (A)	13	16	21.7
<b>Battery Pack Data</b>			
Battery pack model	ES-H48100		
Cell type	Li-ion(LFP)		
Battery Capacity(Ah)	100		
Storage Capacity(kWh)	5		
cycle life	7000*		
Operating voltage range (V)	51.2~57.6V		
Rated voltage (V)	51.2		
<b>Battery Output Data</b>			
Battery Type	Lead-acid battery/lithium battery		
Battery Voltage Range(V)	40-60V		
Max. Charging / Discharging Power(kW)	3		
Max. Charging / Discharging Current(A)	60		
Communication Interface	CAN		
<b>General Data</b>			
working temperature range	-25~60°C		
Working altitude (m)	<4000		
Noise Figure (dB)	<35		
Topology	Transformerless		
cooling method	Natural Convection		
Protection class	IP65		
Humidity	0 ~ 95%		
Human-computer interaction	LCD		
Meter communication mode	RS485		
Dimensions(w*D*H)(mm)	520* 380* 1300		
Warranty	5 years (optional 10 years)		
Weight(kg)	130		
<b>Certification</b>			
Certificates	VDE-AR-N 4105EN/IEC 61000-1/-2/-3/-4,IEC61000-3-11/12,UN38-3 VDE-AR-N 2510-50,IEC/EN 62109-1,IEC 62619,EN 50549,CEI 0-21,CE		



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