



# E-Star-DH1

RESIDENTIAL SERIES



## Product characteristics

- PV reverse polarity protection/Island protection
- AC short circuit/over voltage protection
- DC/AC Surge protection
- IP65 protection level, low noise<35dB
- Battery reverse polarity protection
- MPPT voltage range 180V-850V
- Overload capacity up to 130%
- Support full power discharge, battery charge and discharge automatic management

Hybrid Inverter	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)		180~850	
Number of MPPT /strings per MPPT		2/1	
Maximum input current (A)		12.5/12.5	
MPPT Efficiency		99.50%	
Maximum efficiency	97.90%	98.20%	98.20%
Battery efficiency		96.80%	
Euro Efficiency	97.20%	97.50%	97.50%
<b>AC parameters (Grid tie)</b>			
Rated output power (kVA)	8	10	12
Rated Voltage(Vac)		3L+N+PE,400/360~440	
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>			
Rated power (kVA)	8	10	12
Rated output voltage (Vac)		3L+N+PE,400	
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 Output Data</b>			
Maximum charging voltage (V)		600	
Battery Voltage Range(V)		125~600	
Rated charge / discharge current (A)	40	40	50
Communication Interface		CAN	
<b>General Data</b>			
Topology		Transformerless	
Display		LCD	
Meter communication mode		RS485/GPRS/WIFI/DRM	
Dimensions(WxDxH)(mm)		530 x 200 x 600	
Weight(kg)		29	
Certificates	IEC/EN62109-1/-2; IEC/EN61000-6-1&3;EN50549;VDE 4105-AR-N;NCRfG/PTPIREE;NTS;UNE;OVE		
<b>Battery Model</b>		<b>ES-256V32AH</b>	
<b>Battery Pack Data</b>			
Cell type		Li-ion(LFP)	
Battery Capacity(Ah)		32	
Storage Capacity (kWh)		8.2/16.4/24.6/32.8/41/49.5	
Depth of Discharge(DoD)		90%	
Rated voltage (V)		256	
Operating voltage range (V)		240~288	
Cycle life		10000*	
Dimensions(WxDxH)(mm)		580 x 230 x 820	
Weight(kg)		75	
Certificates		IEC62619,UN38.3	
<b>System</b>			
Working temperature range		-10°C~50°C**	
Working altitude (m)		No derating below 2000m	
Noise Figure (dB)		<35	
Cooling method		Natural Convection	
Protection class		IP65	
Humidity		0~95%	
Warranty		5 years (optional 10 years)	

\* Under specific test conditions

\*\* When the ambient temperature is too low or too high, the performance of battery may be limited.