

# EnerSolis Series Grid-Connected Single Phase

ES3000HC~4600HC



- Compact Size & Low Weight
- User Friendly LCD Display
- Use High MTBF Component
- Convection Cooling (Fan-less)
- Intelligence DSP Controller
- Protection Class IP65
- Wide MPPT Range of 150 to 450 Vdc
- Intelligence MPPT Technology
- Anti-islanding Technology
- RS485 Communication
- De-rating Function
- High MPPT Tracker Efficiency
- Easy Installation

## Specifications

Model	ES3000HC	ES3680HC	ES4000HC	ES4600HC	
Item	Conversion Mode		Sine-wave, Current source, High frequency PWM		
	Inverter Technology		Transformer-less Design		
	Isolation Method				
DC Input Data	Nominal DC Voltage		370 VDC		
	Max. DC Input Voltage		500 VDC		
	Working Range		120VDC~500VDC*		
	Max. DC Input current	7.9 Amp	9.7Amp	10.5 Amp	12.1 Amp
	MPPT Range		150 VDC ~ 450 VDC		
	MPPT Tracker		2		
Efficiency Data	Max. Efficiency		>97.2%		
	Euro Efficiency		>96%		
	CEC efficiency		>96%		
Environmental	Operating Temperature		-25°C~ +50°C / -13°F~122°F		
	Humidity		0 to 90%(Without condensation)		
	Altitude		0 ~ 2000 M / 0 ~ 6600 ft		
	Dimensions (WxHxD,mm/inch)		439x531x157 / 19.4x20.9x6.2		
Mechanical	Weight (kg/lbs)		20 / 44		
	Protection Class		IP65, outdoor		
	Cooling		Convection		
	AC Connection		Screw Terminals		
	DC Connection		MC4		
	Communication Interface		Standard : RS485 Optional: USB, Dry contact, WiFi, TCP/IP		
Front Panel	LCD		Boost input Voltage/Boost input Current/Boost input Power/AC output Voltage /AC output frequency/AC output current / AC output power/AC Energy yield/Inner Temperature/Heat sink Temperature /Status message/ Error message		
	LED		Leakage current fault or DC input isolation fault		
	Key Pad		Spec. of Utility is not matches with the Utility specifications of the inverter Solar Cell power is greater or smaller than sleep power		
Protection	Utility		UP key/ Down key/ Function key/ Enter key		
	Islanding operation detection		Over/under Voltage, Over/under Frequency, Ground fault, DC Isolation fault		
	Over Temperature		Passive : Voltage phase jump detection Active : Reactive power control		
	On-Gird Performance		Reduced output power		
Certification	Safty		VDE0126-1-1/A1, VDE-AR-N 4105		
	EMI/EMC		IEC 62109-1, IEC 62109-2 , IEC 60730-1 EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12		

\* Specifications subject to change without notice.

\*\* Depending on the model and voltage, please contact Ablerex for more information.

\*\*\* The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.

