

# ETS Hybrid Charger & Inverter (Three-phase)

## ETS 10K~60K



### Features

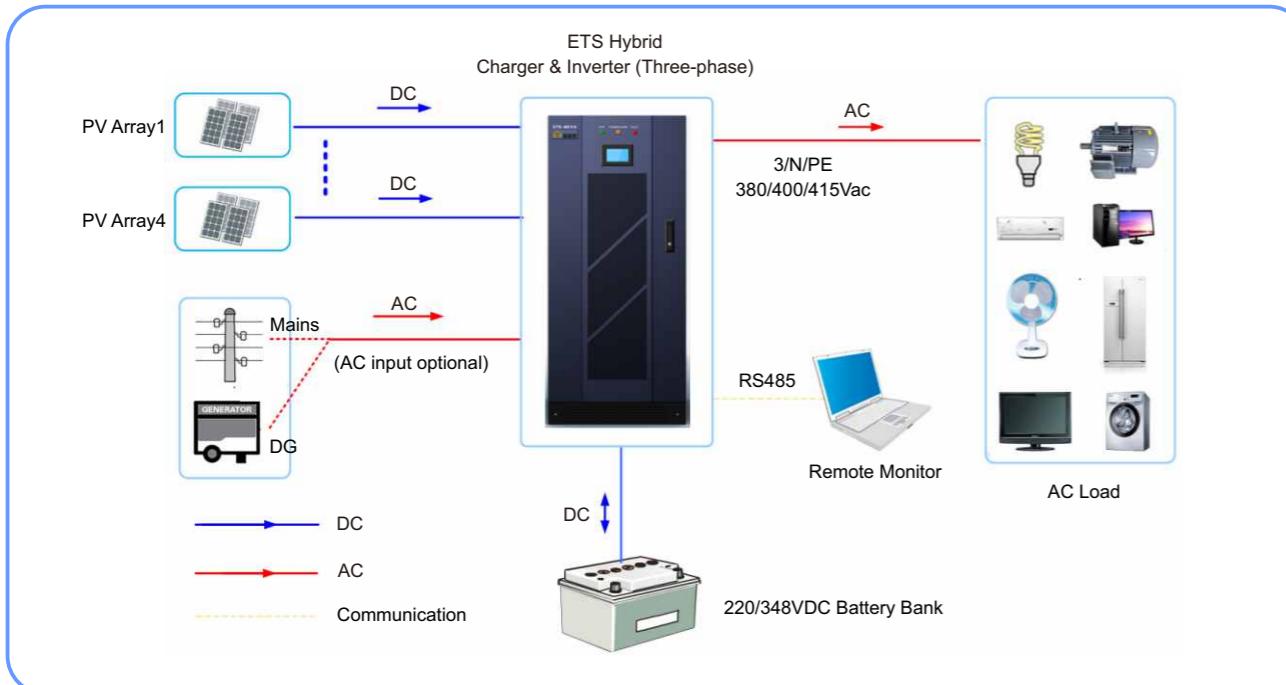
- Built-in MPPT solar controller, maximize the utilization of solar panels, utilization ratio >95%
- Integrated design with controller, inverter and isolated technique
- Solar controller modular design, hot plug function, flexible configuration, easy capacity expansion
- Pure sine wave output, output isolated transformer, safe and stable
- It supports mains/generator input (optional)
- Three phase AC output, support 100% unbalanced load
- Intelligent battery management and temperature compensation function
- City power/diesel generator input interface (optional)
- LCD display + LED status indicator
- Complete protections
- 92% system efficiency
- Strong environment adaptability

**SC22050 / SC35040**



### Description

- ETS series three-phase off-grid inverter adapts integrated design of solar controller, inverter and isolated transformer. The controller adapts MPPT technology and intelligent battery management design which is very efficient and smart; integrated pure sine wave inverter and low frequency isolated transformer make it with excellent overload performance, suitable for a variety of electrical appliances, It supports mains/generator input (optional), take advantages of old diesel generators, saving initial investment and operation maintenance cost.
- ETS series controller adapts modular design with flexible configuration; the inverter output covers 10kVA~60kVA, supply power for places without city power e.g. remote areas, pastoral areas, islands, communication base stations, bring customer the optimized social, economical and environmental benefits.



### Technical data

Model	ETS 10K	ETS 20K	ETS 30K	ETS 40K	ETS 50K	ETS 60K
<b>DC Input</b>						
PV voltage range (VDC)	250~450				420~650	
PV max. voltage (VDC)	460				660	
Recommended working rated voltage (Vmpp) (VDC)	330				480	
Rated power (kW)	30 (1~3pcs*10kW solar controller module)			60 (1~4pcs*15kW solar controller module)		
<b>AC Input</b>						
AC Input Voltage range (V)	380/400/415±25%					
AC Input Voltage frequency (Hz)	50/60±5%					
<b>AC Output</b>						
Output voltage	3/N/PE, 380/400/415Vac±2%					
Output wave	Pure sine wave					
Rated output power	10kVA/8kW	20kVA/16kW	30kVA/24kW	40kVA/32kW	50kVA/40kW	60kVA/48kW
Crest factor	3					
Overload capacity	105%~110%, 10mins; 110%~125%, 1min; >125%, 10s					
Voltage THD	THDU<3%, linear load; THDU<5%, nonlinear load					
Isolation	Low frequency transformer					
<b>Battery</b>						
Rated DC bus voltage (VDC)	220/192				348	
Battery type	Lead-acid battery					
<b>General Parameters</b>						
Operating temperature range (°C)	-20~+50 (>50°C derating)					
Relative humidity in operation	0~95% (non-condensing)					
Max. operating altitude (m)	5000 (>2000m derating)					
Display	LCD+LED					
Communication	RS485, dry contact					
Protections	Input over/under voltage, output over/under voltage, overload, short circuit, over temperature, reverse polarity, lightning surge protection					
Ingress protection rating	IP20					
Dimension (W*D*H mm)	550*600*1450				600*600*1600	
Weight [without PV module (kg)]	210	230	250	320	350	380
<b>Built-in solar control module</b>						
Model	SC22050				SC35040	
Control type	MPPT					
MPPT accuracy	>99.5%					
Input voltage range (VDC)	250~450				420~650	
Max. input voltage (VDC)	460				660	
Max. input power (kW)	11				16	
Max. input current (A)	45				35	
Output voltage range (VDC)	192~264 (220VDC)/168~230 (192VDC)				310~420	
Max. output current (A)	50				40	
Charging efficiency	≥98%					
Dimension (D*W*H mm)	436*335*84.5					
Weight (kg)	11					

Data may change without any notice.