SO4048/5048/6048/7048

Features

➢ Low Frequency Transformer , High Safety , Strong Overload ability

➢ Multi-functions achieved by one device, such as independent loading, export electricity to grid , AC charge

➢ AC IN side support Grid or generator to improve the reliability for electricity use Multi-Application Mode available(UPS ; Load shifting ; Intelligent Electricity Supply; Electricity Feed applicable etc) & Parameter setting

➢ Multi Application: can make as a DC BUS storage system with MPPT controller for the new PV system user; can add to the existed on grid solar system to make an AC BUS system ; Can make three phase system with 3 devices

➢ Adopt the advanced DSP & Digital Control Technology which makes the system more stable and reliable.

➢ Multi-type battery compatible (Lead-acid , Gel , Lithium-Battery), Battery Management function

➢ Three stage battery charge control (bulk \ float \ absorb)

➢ Recharge batteries from the grid to protect batteries when the battery is too low

➢ Automatic change into off grid mode when grid fails

➢ LCD Display, user friendly interface in multi-lingual language

➢ Separate product available , also can offer as system in cabinet

Applications

➢ (Mobile) communication base station

➢ General family-roof top projects

➢ Small commercial and industrial areas

➢ Areas where there is peak-vallery grid price or grid is not reliable

Solar Hybrid™ Series

SO Series Inverter is a comprehensive power frequency type hybrid inverter for residential and commercial use. This machine connected to battery can provide uninterrupted and stable power supply for customer even though the utility grid is failed. It can also run in the most economical and practical mode by your requirements to achieve objective economic benefits based on the comprehensive estimation and management for grid, battery energy storage unit, load and PV panel array.

DIAGRAM
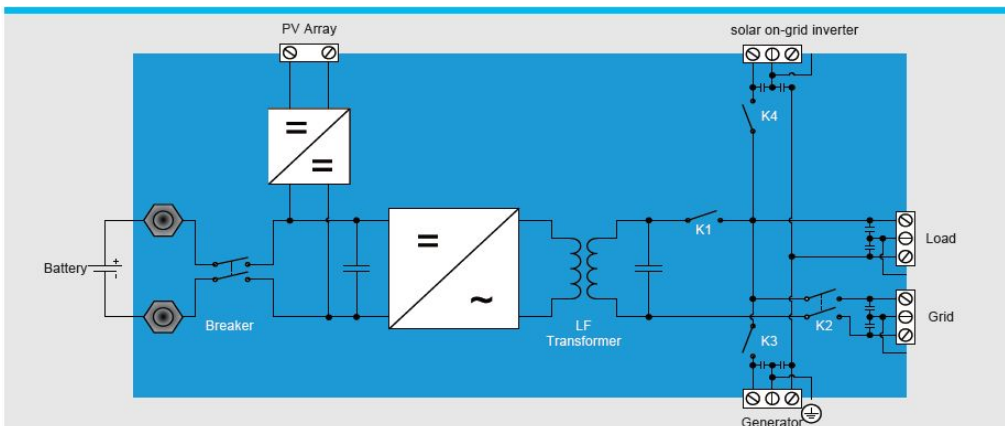
Technical Data

Inverter Model	SO4048	SO5048	SO6048	SO7048
Battery Rated Voltage	48V	48V	48V	48V
Battery Voltage Range	41V – 63V	41V – 63V	41V – 63V	41V – 63V
Continuous rated output power	4000W	5000W	6000W	7000W
Overload Ability	4400W(30min)、6000W(5s)、8000W（surge）	5500W(30min)、7500W(5s)、10000W（surge）	6600W(30min)、9000W(5s)、12000W（surge）	7700W(30min)、10500W(5s)、14000W（surge）
PV input — Max PV input Power	3200W	3200W	3200W	3200W
PV input — PV start voltage / PV work voltage	60Vdc/80Vdc	60Vdc/80Vdc	60Vdc/80Vdc	60Vdc/80Vdc
PV input — PV Max input voltage	140Vdc	140Vdc	140Vdc	140Vdc
PV input — MPPT voltage range	65~120VDC	65~120VDC	65~120VDC	65~120VDC
PV input — Number of MPPT trackes/Max current	1/1 x 60A	1/1 x 60A	1/1 x 60A	1/1 x 60A
PV input — PV Max efficiency	97.5%	97.5%	97.5%	97.5%
Rated AC voltage — Grid Tied Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V	220V/230V/240V
Rated AC voltage — Inverter Voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V	220V/230V/240V
Rated AC Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Rated AC output Current	17.4A	21.7A	26A	31A
Max Efficiency	94%	94%	94%	94%
THD — Grid Tied Current	＜ 4%	＜ 4%	＜ 4%	＜ 4%
THD — Inverter Voltage	＜ 2%	＜ 2%	＜ 2%	＜ 2%
AC Input Max Current	50A	50A	50A	50A
AC Input Voltage Range	184 Vac–264.5 Vac	184 Vac–264.5 Vac	184 Vac–264.5 Vac	184 Vac–264.5 Vac
AC Input Frequency Range	47.5Hz–51.5Hz/57.5Hz-61.5Hz			
On/Off grid Switching time	＜ 20ms	＜ 20ms	＜ 20ms	＜ 20ms
Output waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
Battery Type	VRLA/Lithium Batteries			
Communication	RS485/WiFi (optional)	RS485/WiFi (optional)	RS485/WiFi (optional)	RS485/WiFi (optional)
Operating Temperature Range	0℃ – 45℃	0℃ – 45℃	0℃ – 45℃	0℃ – 45℃
Operating Humidity	10% – 90%	10% – 90%	10% – 90%	10% – 90%
Elevation	＜ 2000m	＜ 2000m	＜ 2000m	＜ 2000m
Degree of protection	Indoor（IP20）	Indoor（IP20）	Indoor（IP20）	Indoor（IP20）
Dimension(W/H/D)	280 ×451 ×530 mm	280 ×451×530 mm	280 ×451×530 mm	280 ×451×530 mm
Weight	47Kg	47Kg	52Kg	52Kg
Warranty(2 / 5 / 7 years)	Yes/Opt./Opt.	Yes/Opt./Opt.	Yes/Opt./Opt.	Yes/Opt./Opt.

Certificate

Comply with EN62109-1,EN62109-2,VDE0126-1-1,AS4777.2:2005,AS4777.3:2005 standard etc.