




**THREE PHASE AC COUPLED
INVERTER**


**SOWAVE SERIES
3-30kW**


Description

The Solenso AC-coupled inverter (3-30kW) is designed for three-phase systems to provide seamless integration with microinverters, which enables future upgrades to a solar battery storage system without altering your existing setup. Its key features include Time-of-Use Optimization, configurable operation modes, optional AFCI and Rapid Shutdown readiness, and built-in anti-feed-in protection. The inverter supports 100% unbalanced output for each phase, and up to 200% unbalanced output for systems up to 10kW. Additionally, it provides smart monitoring and remote firmware upgrades, ensuring easy management and optimization of your solar energy system.


Features


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SODIUM METAL CHLORIDE BATTERY
Support Sodium metal chloride battery
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WIDE RANGE
Voltage Range(150-800V)
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MAX.60A
Max. Charge/Discharge Current 60A

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100% UNBALANCE
Support Unbalance Load
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UPS FUNCTION
Switch Time < 10ms
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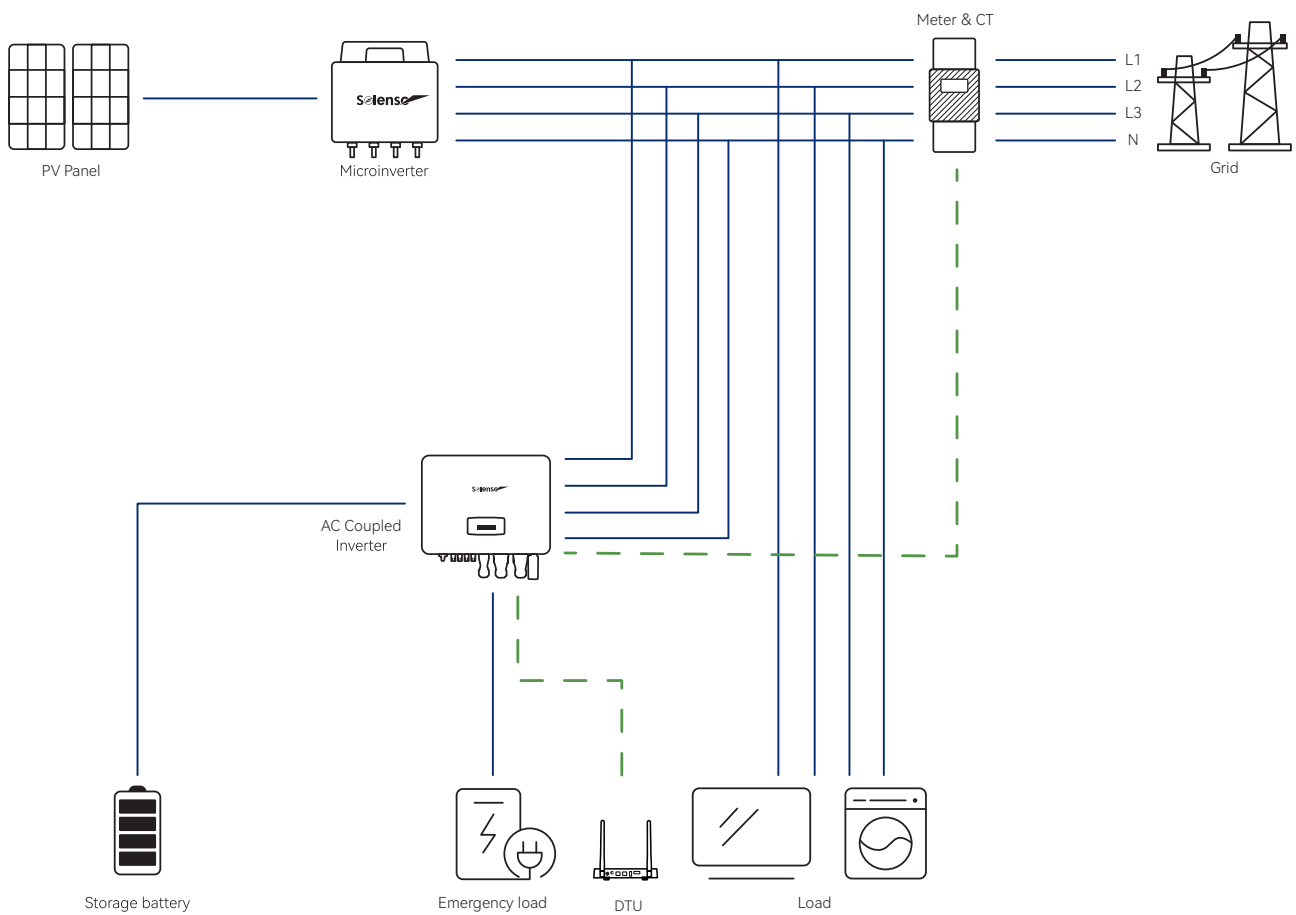
SMART
Smart EMS/BMS
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SUPPORT
Island support.

Retrofitting Storage Solution on Existing Solar System

Adding battery storage to an existing solar system enables homeowners to store their solar pV generated electricity instead of export it to the grid. More savings on your electricity bill.

Three Phase AC Coupled (Retro Fit)



Technical Specifications

Model	SoWave-TH3K	SoWave-TH4K	SoWave-TH5K	SoWave-TH6K	SoWave-TH8K	SoWave-TH10K
Battery Port						
Battery Nominal Voltage (V)	200	200	200	250	300	400
Battery Voltage Range (V)	150-800					
Max. Charge/Discharge Current (A)	30					
Max.Charge/Discharge Power (kW)	3/3.3	4/4.4	5/5.5	6/6.6	8/8.8	10/11
Charging Curve	3 Stages					
Compatible Battery Type	Li-ion/lead-acid/Sodium metal chloride battery					
AC Grid						
Nominal AC Output Power (kW)	3	4	5	6	8	10
Max. AC Input/Output Power (kVA)	4.5/3	6/4	7.5 /5	9/6	12/8	15 /10
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17
Nominal AC Voltage (V)	230/400					
Nominal AC Frequency (Hz)	50/60					
Power Factor	1 (-0.8-0.8) adjustable					
Current THD (%)	<3%					
AC Load Output (Back-up)						
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000
Nominal Output Voltage (V)	230/400					
Nominal Output Frequency (Hz)	50/60					
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5
Peak Output Power	3300VA, 60s	4400VA, 60s	5500VA, 60s	6600VA, 60s	8800VA, 60s	11000VA, 60s
THDV (with linear load)	<3%					
Switching Time (ms)	<10					
Efficiency						
Max. Efficiency	98.00%			98.20%		
Protection						
Reverse Polarity Protection	Yes					
Over Current/Voltage Protection	Yes					
Anti-islanding Protection	Yes					
AC Short-circuit Protection	Yes					
Leakage Current Detection	Yes					
Ground Fault Monitoring	Yes					
Grid Monitoring	Yes					
Enclosure Protect Level	IP65					
Protective class	Class I					
Overvoltage category	OVC III (AC Main)					
General Data						
Dimensions (W*H*D, mm)	370*497*192					
Weight (kg)	20.8					
Topology	Transformerless					
Cooling Concept	Natural Convection			Intelligent Fan		
Relative Humidity	0-100 %					
Operating Temperature Range (°C)	-25 to 60					
Operating Altitude (m)	<4000					
Standby Consumption (W)	<5					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2					
EMC	EN61000-6-2, EN61000-6-3					

Technical Specifications

Model	SoWave-TH12K	SoWave-TH15K	SoWave-TH17K	SoWave-TH20K	SoWave-TH25K	SoWave-TH30K
Battery Port						
Battery Nominal Voltage (V)	450	500	400	500	500	550
Battery Voltage Range (V)	150-800					
Max. Charge/Discharge Current (A)	30	50	50	50	60	60
Max.Charge/Discharge Power (kW)	12/13.2	15/16.5	17/18.7	20/22	25/27.5	30/33
Charging Curve	3 Stages					
Compatible Battery Type	Li-ion/Lead-acid/Sodium metal chloride battery					
AC Grid						
Nominal AC Output Power (kW)	12	15	17	20	25	30
Max. AC Input/Output Power (kVA)	18/12	22.5/15	25.5/17	30/20	37.5/25	45/30
Max. AC Output Current (A)	21.5	27	30	32	40	48
Nominal AC Voltage (V)	230/400					
Nominal AC Frequency (Hz)	50/60					
Power Factor	1 (-0.8-0.8) adjustable					
Current THD (%)	<3%					
AC Load Output (Back-up)						
Nominal Output Power (VA)	12000	15000	17000	20000	25000	30000
Nominal Output Voltage (V)	230/400					
Nominal Output Frequency (Hz)	50/60					
Nominal Output Current (A)	17.4	21.8	24.8	29	36.3	43.5
Peak Output Power	13200VA, 60s	16500VA, 60s	18700VA, 60s	22000VA, 60s	27500VA, 60s	33000VA, 60s
THDV (with linear load)	<3%					
Switching Time (ms)	<10					
Efficiency						
Max. Efficiency	98.30%			98.50%		
Protection						
Reverse Polarity Protection	Yes					
Over Current/Voltage Protection	Yes					
Anti-islanding Protection	Yes					
AC Short-circuit Protection	Yes					
Leakage Current Detection	Yes					
Ground Fault Monitoring	Yes					
Grid Monitoring	Yes					
Enclosure Protect Level	IP65					
Protective class	Class I					
Overvoltage category	OVC III (AC Main)					
General Data						
Dimensions (W*H*D, mm)	370*497*192			558*535*260		
Weight (kg)	20.8		29		36	
Topology	Tranformerless					
Cooling Concept	Intelligent Fan					
Relative Humidity	0-100 %					
Operating Temperature Range (°C)	-25 to 60					
Operating Altitude (m)	<4000					
Standby Consumption (W)	<5					
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G					
Certification & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2					
EMC	EN61000-6-2, EN61000-6-3					