Shinson®
Technology Beyond Limits

SOF Plus Series
Off-Grid Solar Inverter

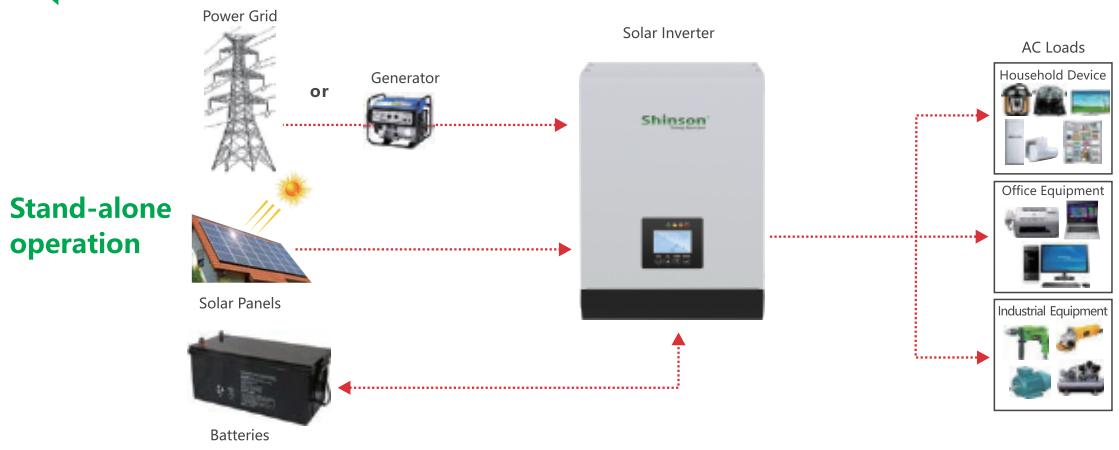
Product Description

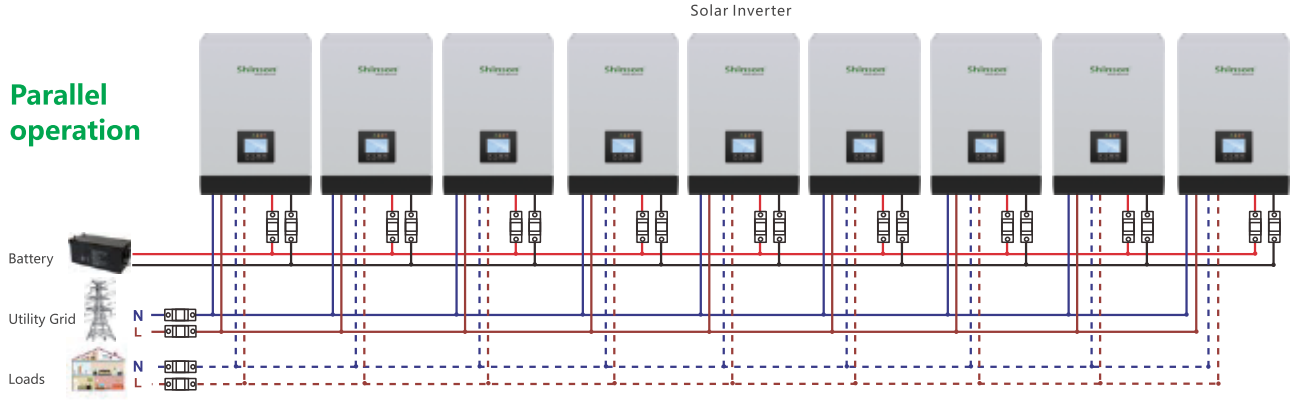
- Pure sine wave output ;
- High frequency design ,high efficiency with low no-load loss ;
- Built-in MPPT solar controller ;
- Combining solar system, AC utility, and battery power source to supply continuous power;
- Smart LCD setting (Working modes, Charging Current, Charge Voltage, AC Output voltage/frequency, etc);
- LED+LCD display is easy to operate;
- Support provide the power to the load without battery (Without parallel operation);
- Multi-protection function(Overload, over temperature, short circuit protection ,etc);
- Parallel operation with up to 9 units (Need to be equipped with parallel plate, only 5KW model support);
- Support USB, RS232 communication , APP (WIFI, etc optional).

Application Area

- Office and public facilities, household system, network transmission equipment, manufacturing, control system, solar energy system, oil field, drilling field operation, etc.
- Provide stable, reliable and safe solutions for families, islands, ships and other small photovoltaic power systems

System Application Diagram





Technical Parameters

Model: HP Plus			SPLUS-3K	SPLUS-5K
Rated Power			3000W	5000W
Peak Power（20ms)			9KVA	15KVA
Battery Voltage			24VDC	48VDC
Size(L*W*Hmm)			440x300x110	
Package Size(L*W*Hmm)			515x375x205	
N.W.(kg)			8.5	9.5
G.W.(kg)			9.5	10.5
Installation Method			Wall-Mounted	
PV	Charging Mode		MPPT	
	Rated PV input voltage		30V-60VDC	360VDC
	MPPT tracking voltage range		30V-115VDC	120V-430VDC
	Max PV Input Voltage Voc (At the lowest temperature)		145VDC	450VDC
	PV Array Maximum Power		1500W	5500W
	PV Array Maximum Power		1	
Input	DC Input Voltage Range		21V-30VDC	42-60VDC
	Rated AC input voltage		208VAC/220VAC/230VAC/240VAC	
	AC Input Voltage Range		90VAC~280VAC(Appliance mode)/170VAC~280VAC(UPS mode)	
	AC Input Frequency Range		40Hz~70Hz (default)	
Output	Efficiency(Battery/PV Mode)		94%(Peak value)	
	Output Voltage(Battery/PV Mode)		208VAC±2%/220VAC±2%/230VAC±2%/240VAC±2%(INV mode)	
	Output Frequency(Battery/PV Mode)		50Hz/60Hz±0.1%	
	Output Wave(Battery/PV Mode)		Pure Sine Wave	
	Efficiency(AC Mode)		>99%	
	Output Voltage(AC Mode)		Follow input	
	Output Frequency(AC Mode)		Follow input	
	Output waveform distortion Battery/PV Mode)		≤3%(Linear load)	
	No load loss(Battery Mode)		≤1% rated power	
	No load loss(AC Mode)		≤0.5% rated power(charger does not work in AC mode)	
Battery	Battery Type	VRLA Battery	Charge Voltage :28.2V; Float Voltage:27V	Charge Voltage :56.4V; Float Voltage:54V
		Customize battery	Charging and discharging parameters of different types of batteries can be customized according to user requirements (charging and discharging parameters of different types of batteries can be set through the operation panel)	
	Max AC Charging Current		120A	60A
	Max PV Charging Current		60A	80A
	Maximum Charging Current (Mains+PV)		120A	80A
	Charging method		Three-stage (constant current, constant voltage, floating charge)	
Protection	Battery low voltage alarm		Factory default: 22V	Factory default: 44V
	Battery low voltage protection		Factory default: 41V	Factory default: 42V
	Battery over voltage protection		32VDC	61VDC
	Overload power protection		Automatic protection (battery mode), circuit breaker or insurance (AC mode)	
	Inverter output short circuit protection		Automatic protection (battery mode), circuit breaker or insurance (AC mode)	
	Temperature protection		>90°C(Shut down output)	
Working Mode			Mains priority/PV priority/Battery priority(Can be set)	
Transfer Time			10ms (typical value)	
Display			LCD+LED	
Thermal method			Cooling fan in intelligent control	
Communication(Optional)			RS232/USB/APP(WIFI monitoring or GPRS monitoring)	
Environment	Operating temperature		-10°C~40°C	
	Storage temperature		-15°C~60°C	
	Noise		≤55dB	
	Elevation		2000m(More than derating)	
	Humidity		0%~95% (No condensation)	

Above parameter revision change without notification.