RIX-GBMH Series

High frequency solar inverter

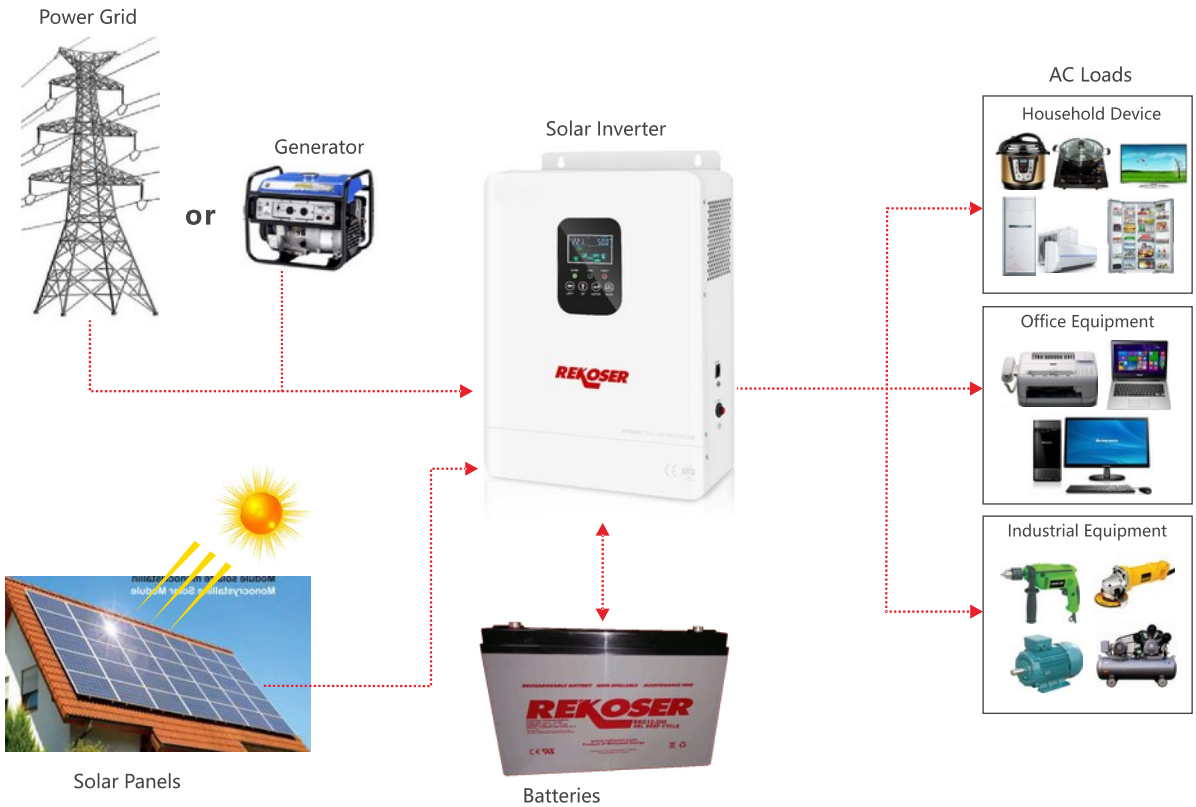
Product Description

- Adopt high-frequency design, high power density, small size, high efficiency and low no-load loss;
- Built-in MPPT controller, integrated solar charging and mains complement design;
- Pure sine wave output, adaptable to any types of loads;
- Battery charge and discharge voltage parameters adjustable, suitable for different types of batteries;
- AC charge current adjustable, battery capacity configuration more flexible;
- Three working modes adjustable: AC first, battery first, PV first;
- Output voltage/frequency adjustable function,adapt to different grid environment;
- Extra wide voltage and frequency input range, support mains or generator;
- LED+LCD display,easy operation and data checking,can set each function and data directly;
- Multi-protection function(overload,over temperature,short circuit protection and so on);
- RS485 communication port/APP 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: RIX-GBMH-			12H10	24H15	24H20	24H32L	24H32	48H50L	48H50	48H72	48H80
Rated Power			1000W	1500W	2000W	3200W	3200W	5000W	5000W	7200W	8000W
Peak power (20mS)			3000VA	4.5KVA	6KVA	9.6KVA	9.6KVA	15KVA	15KVA	21.6KVA	24KVA
Battery Voltage			12VDC	24VDC	24VDC	24VDC	24VDC	48VDC	48VDC	48VDC	48VDC
Product Size (L*W*Hmm)			355x272x91.5			400x315x101.5		440x342x101.5		525x355x115	
Package Size (L*W*Hmm)			443x350x187			488x393x198		528x420x198		615x435x210	
N.W (Kg)			6.4			8.5		10		14	
G.W (Kg)			7.3			9.5		11		15.5	
Installation Method			Wall-Mounted								
PV	Charging Mode		MPPT								
	MPPT tracking voltage range		15V-80VDC	30V-100VDC			120V-450VDC	60V-140VDC	120V-450VDC		
	Rated PV input voltage		15V-30VDC	30V-60VDC			360VDC	60V-90VDC	360VDC		
	Max PV Input Voltage Voc (At the lowest temperature)		120VDC				500VDC	180VDC	500VDC		
	PV Array Maximum Power		840W	1680W			4000W	3360W	6000W	4000W*2	
	MPPT tracking channels (input channels)		1							2	
Input	DC Input Voltage Range		10.5-15VDC	21VDC-30VDC				42VDC-60VDC			
	Rated AC input voltage		220VAC / 230VAC / 240VAC								
	AC Input Voltage Range		170VAC~280VAC (UPS mode) / 120VAC~280VAC (INV mode)								
	AC Input Frequency Range		45Hz~55Hz (50Hz), 55Hz~65Hz (60Hz)								
Output	Output efficiency(Battery/PV Mode)		94% (Peak value)								
	Output Voltage(Battery/PV Mode)		220VAC±2% / 230VAC±2% / 240VAC±2%(IN mode)								
	Output Frequency(Battery/PV Mode)		50Hz±0.5 or 60Hz±0.5 (INV mode)								
	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 :13.8V; Float Voltage:13.7V(Single battery voltage)								
		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)								
	Maximum charging current (mains + PV)		120A	100A	110A	120A	100A	120A	100A	150A	
	Max PV Charging Current		60A	60A	60A	60A	100A	60A	100A	150A	
	Max AC Charging Current		60A	40A	50A	60A	60A	60A	60A	80A	
	Charging method		Three-stage (constant current, constant voltage, floating charge)								
Protection	Battery low voltage alarm		Battery undervoltage protection value+0.5V(Single battery voltage)								
	Battery low voltage protection		Factory default: 10.5V(Single battery voltage)								
	Battery over voltage alarm		Constant charge voltage+0.8V(Single battery voltage)								
	Battery over voltage protection		Factory default: 17V(Single battery voltage)								
	Battery over voltage recovery voltage		Battery overvoltage protection value-1V(Single battery voltage)								
	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/Solar priority/Battery priority(Can be set)								
Transfer Time			10ms (typical value)								
Display			LCD+LED								
Thermal method			Cooling fan in intelligent control								
Communication(Optional)			RS485/APP(WIFI monitoring or GPRS monitoring)								
Environment	Operating temperature		-10℃~40℃								
	Storage temperature		-15℃~60℃								
	Noise		≤55dB								
	Elevation		2000m(More than derating)								
	Humidity		0%~95% (No condensation)								

Note: 1. Models RIX-GBMH-12H10, RIX-GBMH-24H15, RIX-GBMH-24H20, RIX-GBMH-24H32L and RIX-GBMH-48H50L only support mains priority mode and battery priority mode, PV priority work mode not supported.
2. All specifications are subject to change without prior notice.