

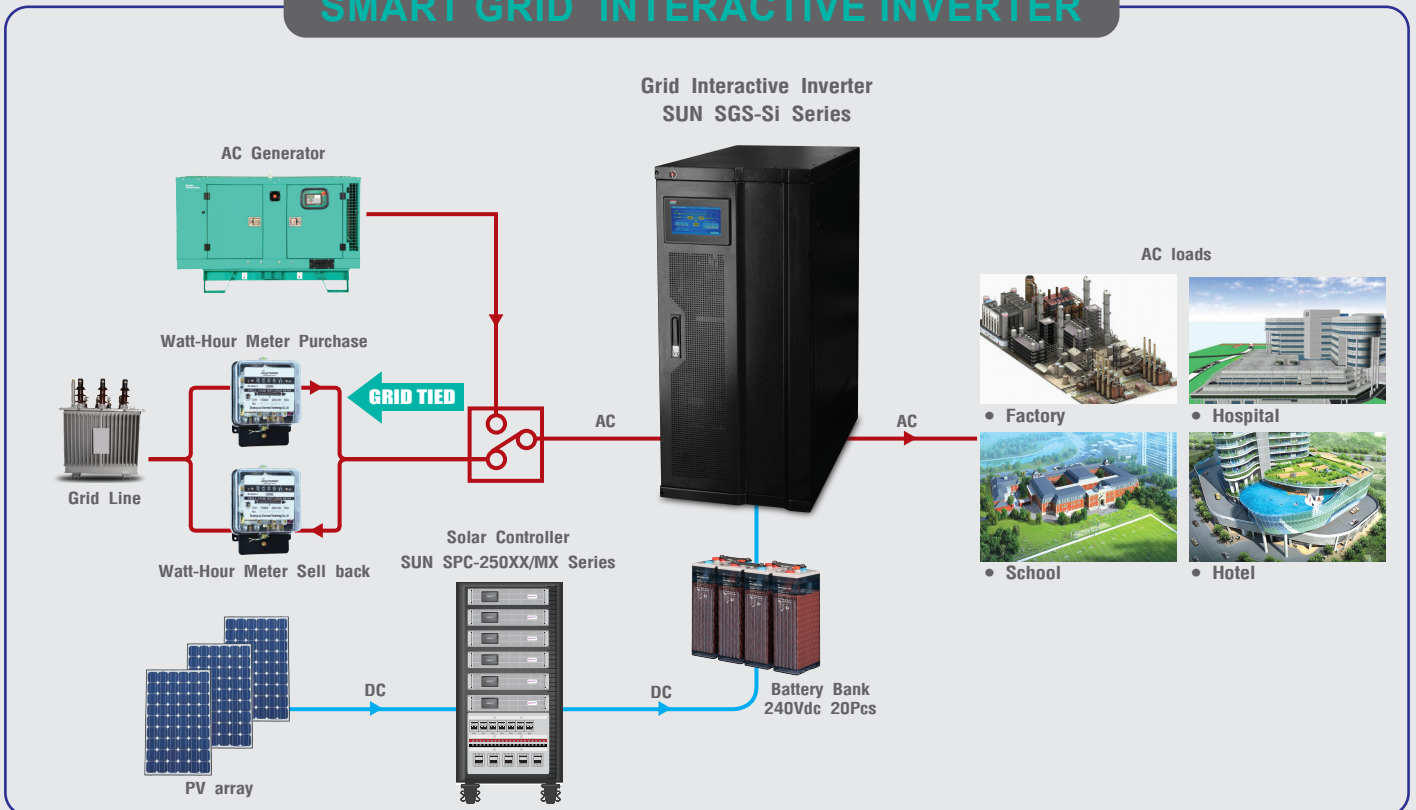
# SUN SGS-Si Series

## Smart Grid Interactive Inverter

- Single phase inverter Technology with output transformer
- Include PWM with MPPT charge controller
- Provide uninterruptible backup power to load when utility grid line is not available
- Smart battery IGBT rectifier charging for small battery capacity
- Feeding excess energy back to grid line
- High efficiency >95%
- Parallel redundancy N+X up to 8 Unit
- Generator connected signal and automatic start generator signal when generator provide as other energy source of the system
- Transfer time 4-10ms Inverter to utility
- Special design for using at high grid fluctuation area
- User settable operation:
  1. Excess PV energy back feed to utility line
  2. No PV energy back feed to utility line, PV energy only supply to load.
  3. Setable & %Control Excess PV energy back feed to utility line
  4. Setable Battery %DoD and %SoC
- Battery temperature compensation compensation (Temperature sensor is not included)
- ISO9001 and ISO14001 certified factory

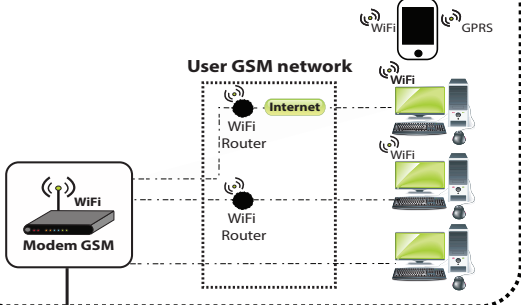


## SMART GRID INTERACTIVE INVERTER

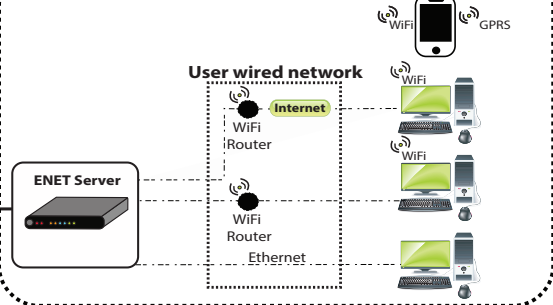


## Information Communication Technology

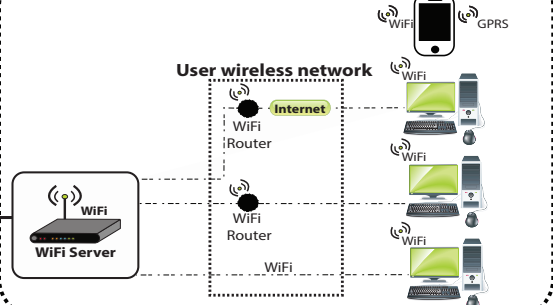
### GSM Network monitoring system solution



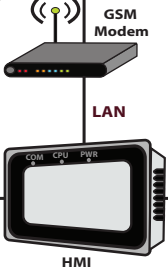
### Ethernet wired monitoring system solution



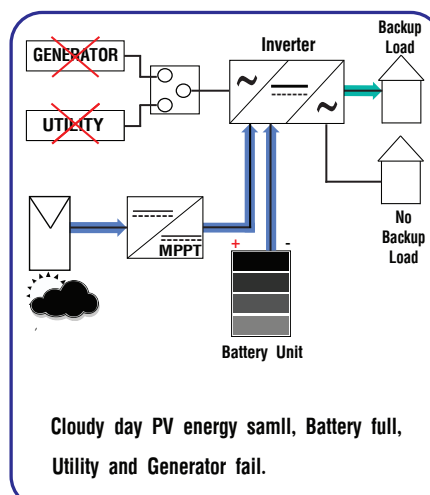
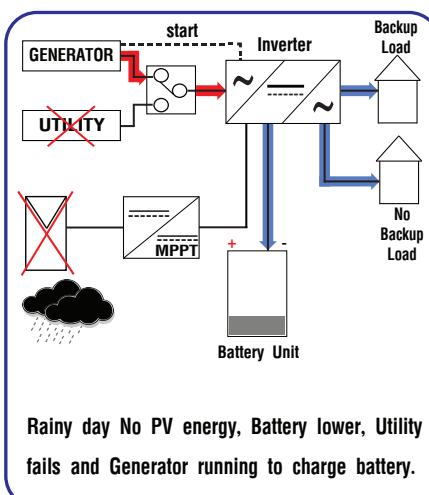
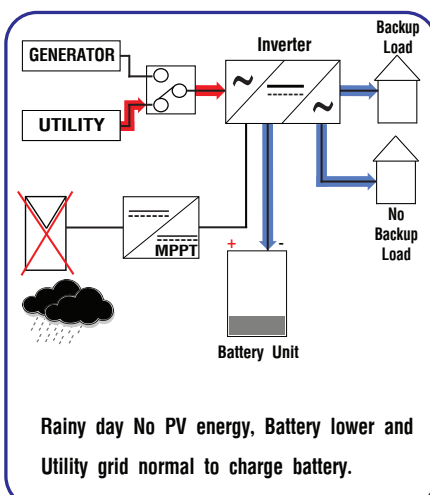
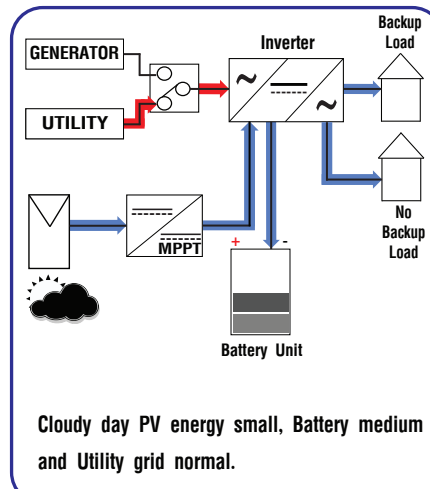
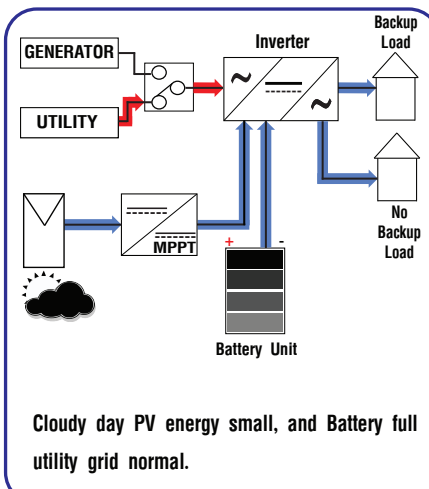
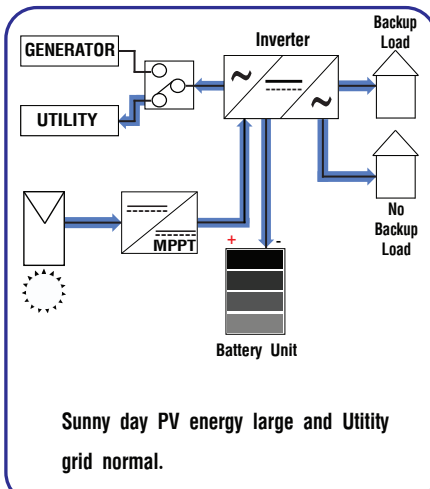
### WiFi wireless monitoring system solution



Grid Interactive Inverter  
 SUN SGS-Si Series



## Operation Mode



# SUN SGS-Si Series

Single Phase Smart Grid Interactive Inverter



Model		SGS-10Si	SGS-15Si	SGS-20Si	SGS-25Si	SGS-30Si	SGS-35Si	SGS-50Si
SMART GRID SYSTEM	Application	Smart Grid System for Mini Plant						
	Control & Technology	Smart DSP control Double Conversion IGBT Technology						
HYBRID SYSTEM	Inverter	10kW	15kW	20kW	25kW	30kW	35kW	50kW
	Battery Storage	100-200Ah	150-300Ah	200-400Ah	250-500Ah	300-600Ah	350-750Ah	450-900Ah
	PV System	10-12kWp	15-17kWp	20-25kWp	25-30kWp	30-35kWp	35-40kWp	45-50kWp
	Generator	10kW	15kW	20kW	25kW	30kW	35kW	50kW
	Electrical Grid	10kVA/45A	15kVA/68A	20kVA/90A	25kVA/115A	30kVA/136A	35kVA/160A	50k/227A
BATTERY VOLTAGE	Normal Voltage	240 Vdc						
	Voltage Range	210-290 Vdc						
	Max.AC Charging Current	40A	60A	75A	90A	112A	130A	200A
	Maximum Battery current	42A	63A	85A	105A	125A	145A	210A
IGBT CHARGER/RECTIFIER	Voltage charge	250-290 Vdc						
	Charging Current (Max.)	20Adc	30 Adc	40 Adc	50Adc	60Adc	75Adc	100Adc
AC INPUT GRID LINE GENERATOR	Generator Power	10kW	15kW	20kW	35kW	40kW	50kW	50kW
	Voltage	L-N: 220/230/240 Vac +/-10%						
	Phase	1Phase 2Wire + PE						
	Frequency	50/60 Hz ±3%						
	Function start/stop	Relay dry contact 10 A(ACC on and start )						
	Power Continuous(PF=1)	10kW	15kW	20kW	25kW	30kW	35kW	50kW
AC OUTPUT	Output Voltage	L-N: 220/230/240Vac 1Phase 2Wire+PE						
	Voltage Regulation	+/-5% steady load, <4% at 100% step load within 0.1sec						
	Frequency	50/60 Hz ±0.1%						
	Total Harmonic Distortion	THD<3% (Linear load)						
	Wave Form	Pure sine wave						
	Overload Capability	>125% load for 10 min, 150% load for 30sec, >150% load for 10sec, 200% at 2 Sec.						
ISOLATION	Type	Galvanic isolation						
EFFICIENCY	Inverter Peak (Max.)	>94%						
PROTECTION	System	Over current, Overload, Over temperature, Short circuit, Over voltage, Under voltage, Low battery voltage and Over battery voltage						
	IP level	IP20						
INDICATOR	HMI 7 inch Display	AC, Inverter, overload and Fault Output voltage, Frequency, Output power, AC Energy Hour, today, Month, Year,AC Energy ACC., Battery voltage, Load, DC current, inverter status and Fault						
ALARM	Operation Alarm	Low battery, Overload, Over temperature and Fault						
COOLING	System Operate	Automatic cooling fans						
ENVIRONMENT	Temperature	0 - 45°C						
	Relative Humidity	0 - 95%(Non-condensing)						
DESIGE REGULATION	Tested According to	ISO9001, ISO14001, IEC 62040, Accordance to IEEE 929-2000, IEEE 1547-2003, IEC 61727-2004 and IEC 62116-2008 Incorporating with PEA Recommendation						
PHYSICAL	Dimension WxDxH(mm.)	550x890x1550(with SPC250-64)					700x880x1600	
	Net Weight /Weight(kg)	200/250	250/300	250/300	300/350	300/350	600/650	600/650

\*Continuous products development is our commitment. In that manner, the above specifications may be changed without prior notice.

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