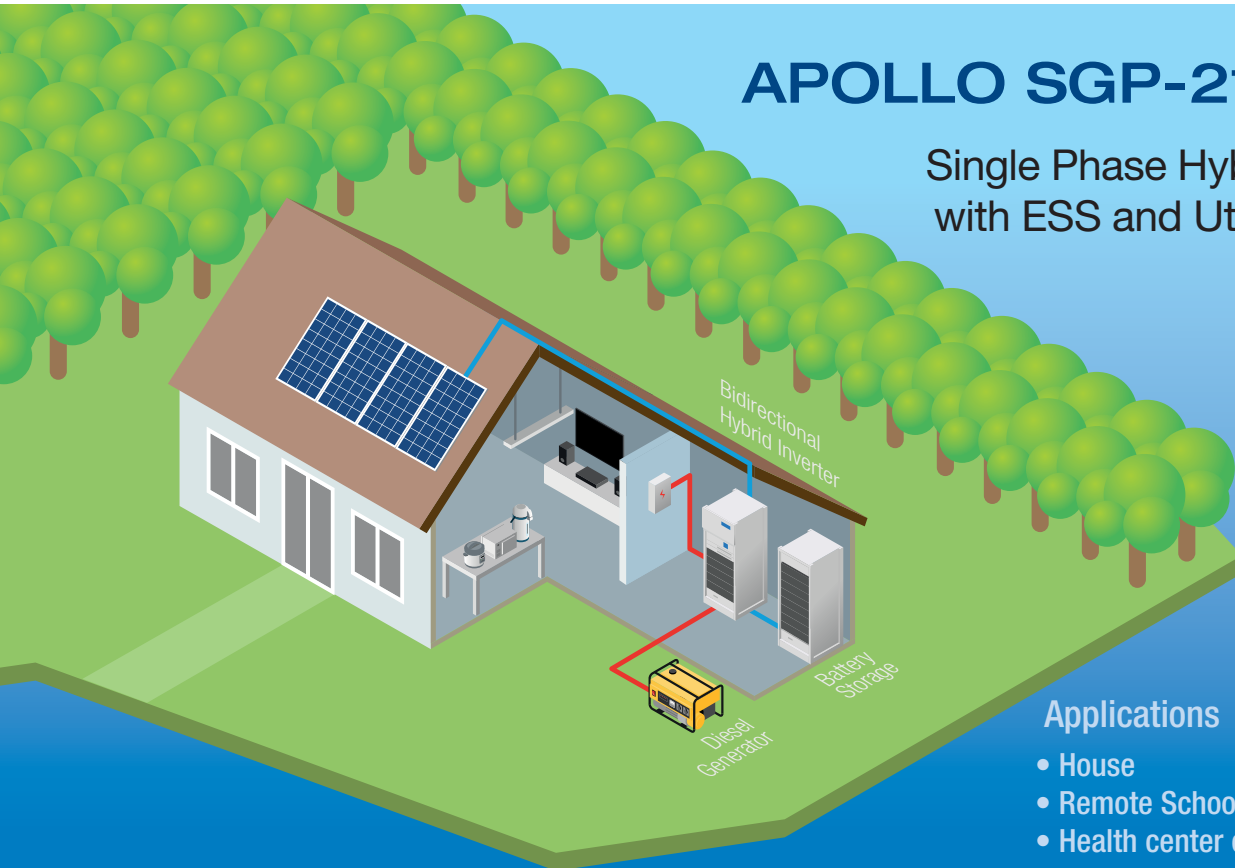


APOLLO SGP-210(RSi)

Single Phase Hybrid Inverter
with ESS and Utility Backup



Applications

- House
- Remote School
- Health center or research center
- Remote government office

APOLLO SGP-210 (RSi) series is stand-alone bidirectional inverter that is specially designed for solar backup system where AC power output is needed. It can be incorporated with the utility grid line or diesel generator or the battery bank which is used as the priority energy source. The inverter supplies energy from battery bank until the battery voltage reach the battery level then switch to supply energy from utility grid line or diesel generator.

- High efficiency bidirectional inverter with built-in output transformer
- Built-in MPPT solar charge controller
- Stable output voltage and frequency
- High reliability design for remote are
- High efficiency
- Full protection for overload, short circuit and over temperature
- Reverse polarity protection
- Including Battery Management System (BMS) for lithium battery
- Data logger and remote monitoring system (option)
- ISO 9001, ISO 14001 and ISO 45001 certified factory



Close front door

Built-in output transformer

Built-in MPPT charge controller

Battery Management System (BMS) for Lithium Battery

MODEL			SGP-218C(RSi)	SGP-219C(RSi)	SGP-2110C(RSi)	SGP-2111C(RSi)	SGP-2112C(RSi)
BIDIRECTIONAL INVERTER	AC Input	Voltage	220 / 230 / 240 Vac (L-N)				
		Voltage range	220 Vac ± 10%				
		Phase	Single phase				
		Frequency	50 / 60 Hz ± 3 Hz				
	AC Output	Maximum AC current	22 A	30 A	36 A	45 A	60 A
		Rated power	3.5 kVA / 3.5 kW	5 kVA / 5 kW	6 kVA / 6 kW	7.5 kVA / 7.5 kW	10 kVA / 10 kW
		Voltage	220 / 230 / 240 Vac (L-N)				
		Voltage regulation	± 1% (steady load), < 7% at 100% step load within 0.1 sec.				
		Phase	Single phase				
		Frequency	50 / 60 Hz ± 0.1% (auto sensing)				
		Wave form	Pure sine wave				
		Total harmonic distortion (THDv)	Total < 3%				
		Maximum AC current	16 A	23 A	27 A	34.5 A	46 A
		Maximum charging current	12 A	18 A	24 A	32 A	38 A
		Inverter peak efficiency	> 96.5%				
SYSTEM CONTROLLER	System Control Unit (SCU)	Optional	Control system, send and receive system data, local monitoring or remote monitoring				
SOLAR CHARGE CONTROLLER	PV Input	Maximum PV power	4.4 kWp	6.6 kWp	6.6 kWp	8.8 kWp	13.2 kWp
		Number of PV input	2 x MC4	3 x MC4	3 x MC4	4 x MC4	6 x MC4
		Number of MPPT	1				
		Maximum current (Isc) per MC4	25 A				
		MPPT tracking voltage (Vmp)	85 - 116 Vdc				
		Max. open circuit voltage (Voc)	< 145 Vdc				
		Charger peak efficiency	> 98%				
	DC level	Nominal battery voltage	43.2 - 56.8 Vdc				
		Maximum charging current	80 A	120 A	120 A	160 A	240 A
ENERGY STORAGE SYSTEM (ESS)	Battery per module	Type	Lithium Iron Phosphate (LiFePO4) (LFP)				
		Nominal voltage	48 Vdc				
		Capacity	2.4 kWh				
		Discharge current	0 - 50 A				
	ESS Module	Number of module	5 module	5 modules	5 modules	4 modules	4 modules
		Capacity	12 kWh	12 kWh	12 kWh	9.6 kWh	9.6 kWh
	Operating Condition	Operating temperature	-20°C to +65°C				
Operating SOC		10 - 90%					
ENVIRONMENT		Temperature	0 - 45°C				
		Relative humidity	0 - 95 % (Non - condensing)				
		Pollution degree classification	III				
		Maximum operating altitude	2,000 m / 6,560 feet (without derating)				
DESIGN REGULATION	Standard		IEC 61683 (for efficiency test), IEC 62109-1, IEC 62109-2				
	Ingress protection		IP30				
	Protective class		I				
	Overvoltage category		II (input and output) (in accordance with IEC 62109-1)				
DIMENSION	W x H x D		54.6 x 147 x 70 cm				
WEIGHT	Approximate in kg		340 kg	350 kg	360 kg	420 kg	430 kg

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