

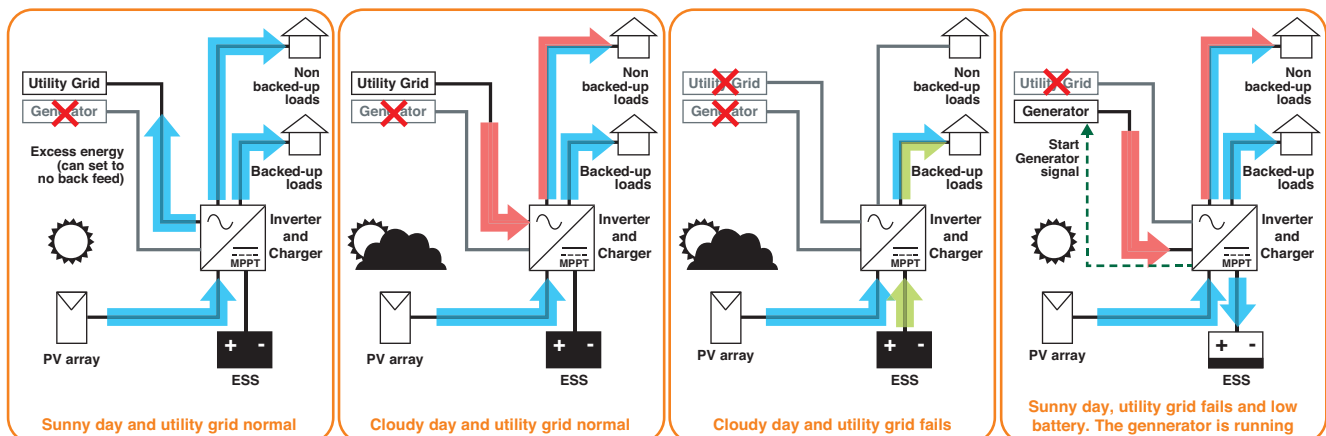
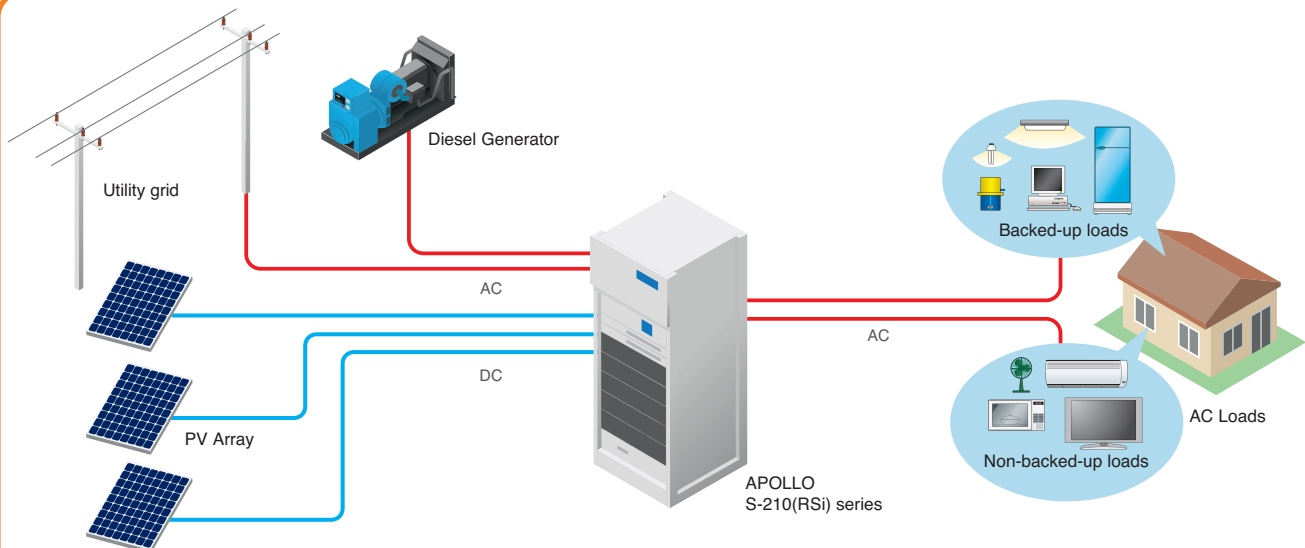
APOLLO S-210ia(RSi)

Single Phase Bidirectional Dual Mode Hybrid Inverter with ESS



Close front door

- Single phase bidirectional inverter with built-in output transformer
- Built-in MPPT solar charge controller
- Low harmonic distortion (less than 3%)
- High efficiency
- High reliability design for remote area
- Monitor energy available from the renewable energy (DC) sources and minimize the charging current
- Including Battery Management System (BMS) for LFP battery
- Data logger and remote monitoring system (option)
- ISO 9001, ISO 14001 and ISO 45001 certified factory



APOLLO S-210ia (RSi) series is a single phase bidirectional dual mode hybrid inverter capable of functioning as a main supply power source as well as providing automatic control and management of battery bank. The inverter features very high efficiency in both charger and inverter modes with maximum efficiency. It is suitable for unstable grid areas.

SPECIFICATIONS			S-217Cia (RSi)	S-218Cia (RSi)	S-219Cia (RSi)	S-2110Cia (RSi)
BIDIRECTIONAL INVERTER	AC Input	Voltage	220 / 230 / 240 Vac (L-N)			
		Phase	Single phase			
		Frequency	50 / 60 Hz ± 3 Hz			
		Maximum AC current to inverter	17 A	22 A	30 A	35 A
		Maximum AC current (total)	30 A	38 A	53 A	63.6 A
	AC Output	Rated power	2.7 kVA / 2.7 kW	3.5 kVA / 3.5 kW	5 kVA / 5 kW	6 kVA / 6 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%			
		Max. AC current Backed up	12 A	16 A	23 A	27 A
		to load Non-backed-up	12 A	16 A	23 A	27 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	3.3 kWp	4.4 kWp	6.6 kWp	6.6 kWp
		Number of PV input	1 x MC4	2 x MC4	3 x MC4	3 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	60 A	80 A	120 A	120 A
ENERGY STORAGE SYSTEM (ESS)	Battery per module	Type	Lithium Iron Phosphate (LiFePO4) (LFP), Lead Acid (LA) and Sodium Nickel Chloride (SoNick)			
		Nominal voltage	48 Vdc			
		Capacity	2.4 kWh			
		Discharge current	0 - 50 A			
	ESS Module	Number of module	1 module	2 modules	3 modules	4 modules
		Capacity	2.4 kWh	4.8 kWh	7.2 kWh	9.6 kWh
	Operating Condition	Operating temperature	-20°C to +65°C			
		Operating SOC	10 - 90%			
		Temperature	0 - 45°C			
ENVIRONMENT		Relative humidity	0 - 95 % (Non - condensing)			
		Pollution degree classification	III			
		Maximum operating altitude	2,000 m / 6,560 feet (without derating)			
			IEC 61683 (for efficiency test), IEC 62109-1, IEC 62109-2			
DESIGN REGULATION	Standard		IP30			
	Ingress protection		I			
	Protective class		II (input and output) (in accordance with IEC 62109-1)			
	Overvoltage category					
DIMENSION	W x H x D		54.6 x 147 x 70 cm			
WEIGHT	Approximate in kg		170 kg	218 kg	260 kg	300.5 kg

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