

APOLLO S-210 ia

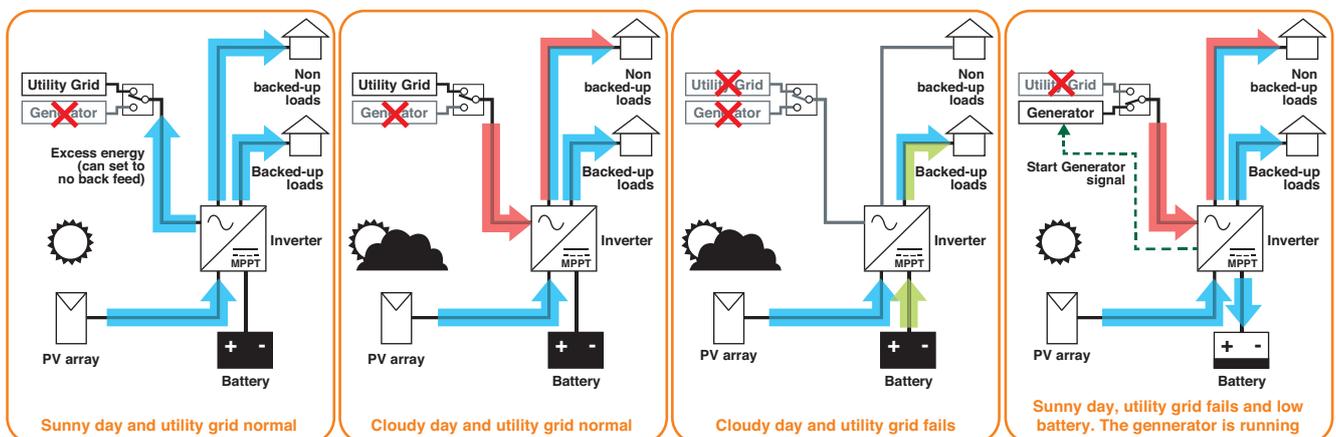
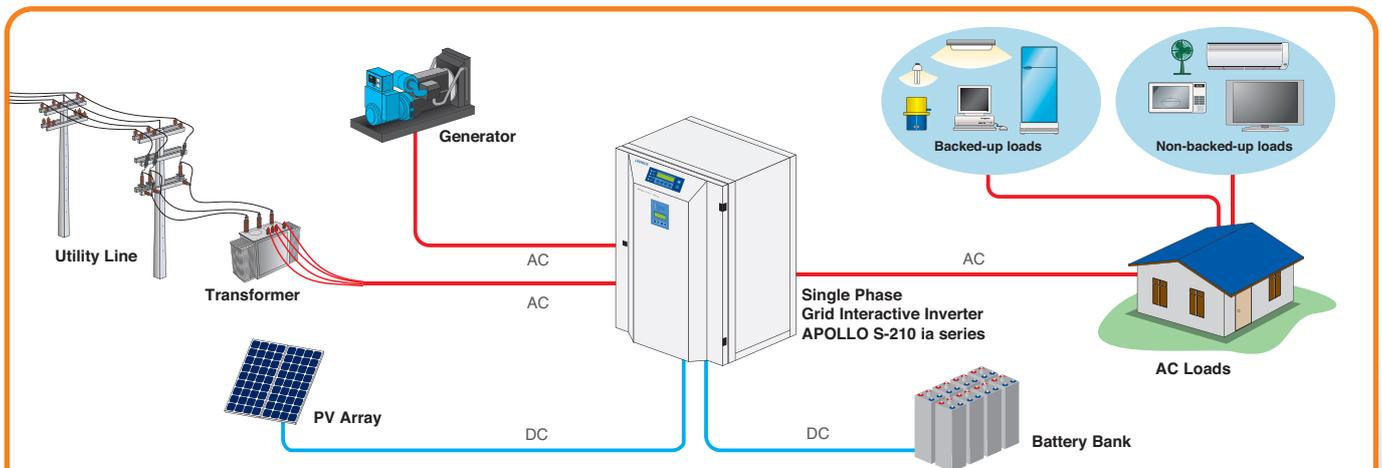


3.5 kVA - 6 kVA

7.5 kVA - 10 kVA

Single Phase Grid Interactive Inverter (Grid connected inverter with battery backup capability)

- Single phase bidirectional inverter with built-in output transformer
- Include PWM with MPPT charge controller
- Provide uninterrupted backup power to load when utility grid line is not available.
- Smart battery charging for small battery capacity
- Feeding excess energy back to grid line
- Low harmonic distortion (less than 3%)
- High efficiency > 96.5%
- 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 backed-up and non-backed-up loads
- Battery temperature compensation (option)
- ISO 9001 and ISO 14001 certified factory



The APOLLO S-210ia series is a single phase grid interactive inverter with built-in MPPT charge controller. It can operate as grid tie inverter when utility line is available to reduce energy consumption. The inverter has two outputs. The output that provide backup power from storage and PV for the selected section house when utility line is not available and the output without back up power to help utilize PV power to reduce or prevent back feed power to

APOLLO S-210 ia series Single Phase Grid Interactive Inverter

MODEL		S-218C ia	S-219C ia	S-2110C ia	S-2111C ia RM	S-2112C ia RM	
RATED POWER	PV input	3.8 kWp	5.7 kWp	6.8 kWp	8.5 kWp	11.4 kWp	
	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	
	Maximum power at 25°C for 1 hour	4 kW	5.5 kW	6.5 kW	8 kW	11 kW	
BATTERY	Nominal voltage	48 Vdc					
	Voltage range	40 - 58 Vdc					
	Max. inverter charging current	50 A	70 A	84 A	105 A	140 A	
	Maximum battery current	100 A	145 A	174 A	217 A	287 A	
PV INPUT	MPPT tracking voltage range (V _{mp} of PV string)	> 64 Vdc					
	Max. open circuit voltage (V _{OC} of PV string)	≤ 145 Vdc					
	Maximum PV current	72 A	104 A	125 A	156 A	208 A	
AC INPUT FROM GRID LINE OR GENERATOR	Voltage	220 / 230 / 240 Vac (L-N) ± 10%					
	Phase	single phase					
	Frequency	50 / 60 Hz ± 3%					
	Max. AC current to inverter	22 A	30 A	36 A	45 A	60 A	
	Max. AC current (Total)	38 A	53 A	63.6 A	79.5 A	106 A	
	Recommended generator power	≥ 14 kVA	≥ 19 kVA	≥ 23 kVA	≥ 28 kVA	≥ 38 kVA	
	Automatic start / stop generator	Dry contact 5 A					
AC OUTPUT	Voltage	220 / 230 / 240 Vac (L-N)					
	Voltage regulation	± 1%					
	Phase	single phase					
	Frequency	50 / 60 Hz ± 0.1% (crystal control) (auto sensing)					
	Wave form	Pure sine wave					
	Total harmonic distortion	< 3%					
	Maximum surge current	200%				160%	
	Inrush current and duration	40A @1 sec.	57A @1 sec.	68A @1sec.	85A @1sec.	91A @1sec.	
	Max. AC current to load	Backed up	15.9 A	22.7 A	27.2 A	34.1 A	45.4 A
		Non-backed-up	16 A	23 A	28 A	34.5 A	46 A
ISOLATION	Galvanic isolation	yes					
EFFICIENCY	Peak efficiency of inverter	> 94%				> 96.5%	
	Peak efficiency of charger	> 98%				> 98%	
PROTECTION	Over current / Overload / Over temperature / Short circuit						
INDICATOR	Inverter display	LED	Standby / Run, AC, Full battery / Low battery, Alarm				
		LCD	Inverter (voltage / current / frequency / power / reactive power), Load (percentage, voltage, frequency), Battery (voltage / current / state of charge (%)), Internal charging current, External charging current, DC power, Heat sink temperature, Battery temperature (option), Today AC inverter energy (input / output), Today DC inverter energy (input / output), Accumulated AC inverter energy (input / output), Accumulated DC inverter energy (input / output), System status, Time, Date, Data log				
	Charger display	LED	Battery Level, PV Voltage Level, Operation Status, Alarm				
		LCD	Digital meter, 180 days power and event logger				
AUDIBLE ALARM	Buzzer	Low battery, Over load, Short circuit, Over temperature					
COOLING	Automatic cooling fan						
ENVIRONMENT	Temperature	0 - 50°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	IP 30					
	Protective class	I					
	Overvoltage category	II (input and output) (in accordance with IEC 620109-1)					
	Isolation level	Isolation transformer (reinforced)					
DIMENSION	W x H x D (cm)	60 x 105 x 46 cm			70 x 100 x 54.6 cm		
WEIGHT	Approximate in kg	106 kg	114 kg	122 kg	180 kg	225 kg	

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

Authorized Distributor

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