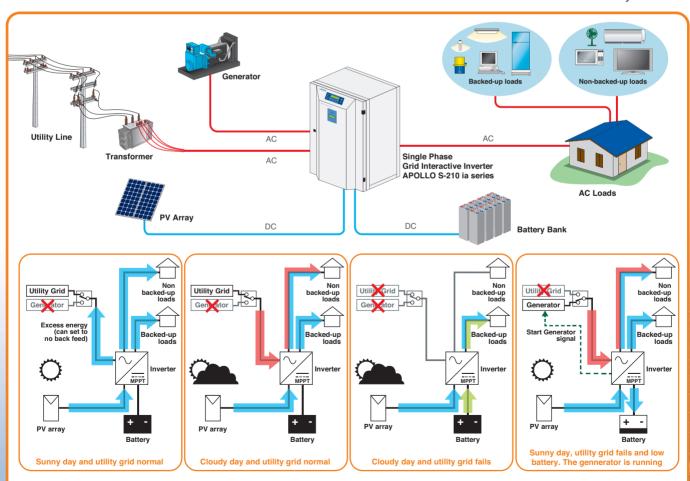
## **LEONICS**®



## APOLLO S-210 ia

## 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 utility line.









## APOLLO S-210 ia series Single Phase Grid Interactive Inverter

**SPECIFICATIONS** 

MODEL		S-218C ia	S-219C ia	
RATED POWER	PV Input		3.8 kWp	5.7 kWp
	AC Output		3.5 kW	5.0 kW
BATTERY	Nominal Voltage		48 Vdc	
	Max. inverter charging current		50 A	70 A
	Maximum battery current		100 A	145 A
PV INPUT	MPPT tracking voltage range		> 64 Vd	
	(V <sub>mp</sub> of PV string)			
	Max. open circuit voltage		≤ 145 Vdc	
	(V <sub>oc</sub> of PV string)			
	Maximum PV current		72 A	104 A
AC INPUT FROM	Voltage		220 / 230 / 240 Vac	
GRID LINE OR	Phase		single phase	
GENERATOR  AC OUTPUT	Frequency		50 / 60 Hz ± 3%	
	Max. AC current to inverter		22 A 30 A	
	Max. AC current (Total)		38 A	53 A
	Recommended generator power		≥ 10 kW	≥ 15 kW
	Automatic start / stop generator		Dry contact	
	Voltage		220 / 230 / 240 Vac (L-N)	
AC 0011 01	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%	
			200%	
	Maximum surge current  Max. AC current Backed up		15.9 A 22.7 A	
		•		
ISOLATION	to load	Non-backed-up	16 A	23 A
	Galvanic isolation		yes > 94% > 96.5%	
EFFICIENCY	Peak efficiency of inverter			
DDOTECTION	Peak efficiency of charger		> 98%	> 98%
PROTECTION	larrantan dia alarr	LED	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 Accmulated AC inverter energy (input / output),	
	Charger diapley		Accmulated DC inverter energy (input / output),	
		LED	System status, Time, Date, Data log Battery Level, PV Voltage Level, Operation Status, Alarm	
	Charger display	LED	-	
ALIDIADLE		LCD	Digital meter, 180 days pov	
AUDIABLE			Low battery, Over load, Short of	circuit, Over temperature
ALARM			A 11	Dia n. fa
COOLING	Townson		Automatic cooling fan	
ENVIRONMENT	Temperature Relative humidity		0 - 50°C	
DEGLOS			0 - 95 % (Non - condensing)	
DESIGN			AS 3100	
STANDARD				
DIMENSION WEIGHT	W x H x D (cm)  Approximate in kg		60 x 105 x 46 cm 106 kg 114 kg	

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

Authorized Distributor

 ${\sf LEO\ ELECTRONICS\ CO., LTD.}$ 

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