APOLLO MAXX

Advanced ALL In One solar inverter With parallel and three phase capability

Apollo Maxx 2KW-5KW

Apollo Maxx is a powerful inverter integrated multiple functions, including a high-performancetrue sine wave inverter, a powerful battery charger, a MPPT charge controller, a high-speed automatic transfer switch and two outputs for load management.

Apollo Maxx inverter can be used in multiple applications. With a simple setting, you can compose a power backup, AC coupling, or solar hybrid system. Its distinguishing surge capability makes it capable to power mostly demanding appliances, such as fridge, freezer, water pump and air-conditioner etc.

With the function of power assist & power control, it can be used to work with a limited AC source such as generator or limited grid. Apollo Maxx can automatically adjust its charging current avoiding grid or generator to be overloaded. In case of temporary peak power appears, it can work as the supplement source to generator or grid.

- All in one, plug and play design for easy installation
- Can be applied for DC coupling, solar hybrid system and power backup system
- Parallel and three phase capability
- Typical 0ms UPS class transfer speed, max<2ms
- Can be used for self-consumption system support feedback to grid
- Power assist & Power control
- Inverter efficiency up to 96%
- MPPT efficiency up to 98%
- Harmonic Distortion<2%
- Extremely low status consumption power
- High performance designed for all kinds of inductive load
- BR premium II battery charging management
- With built in battery SOC estimation
- Equalization charging program was available for flooded and OPZS battery
- Lithium Battery charging was available
- With built in AGS
- Fully programmable by APP
- Remote monitoring and control via Nova online portal

Model No.	Apollo Maxx 2.0M	Apollo Maxx 3.0M	Apollo Maxx 2.0S	Apollo Maxx 3.0S	Apollo Maxx 5.0S
Product Topology	Transformer based				
Power Assist	Yes				
Parallel & Three Phase	Yes				
AC input voltage range (VAC)	175~265				
AC input Frequency range (Hz)	45~65				
AC input Current (transfer switch) (A)	32				50

Inverter

Nominal battery voltage (V)	24		48		
Input voltage range (V)	21~34		42~68		
AC output voltage (VAC)	220/230/240 ± 2%				
AC output Frequency (Hz)	50/60 ± 0.1%				
Harmonic distortion	< 2%				
Load Power factor	1.0				
Cont. output power at 25°C (VA)	2000	3000	2000	3000	5000
Output power (60min) at 25°C (W)	2000	2500	2000	3000	5000
Cont. output power at 25°C (W)	1600	3000	1600	2500	4000
Peak power (W)	4000	6000	4000	6000	10000
Maximum efficiency	94%	94%	95%	95%	96%
Zero load power (W)	11	14	11	14	18

Charger

Charge voltage 'absorption' (V)	28.8		57.6		
Charge voltage 'float' (V)	27.6		55.2		
Battery types	AGM / GEL / OPZV / Lead-Carbon / Li-ion / Flooded				
Max AC charge current (A)	50	80	25	40	70
Temperature compensation	Yes				

Solar Charge Controller

Max output current (A)	60				90
Maximum PV power (W)	2000		4000		6000
PV open circuit voltage (V)	150				
MPPT voltage range (V)	65~145				
Charge voltage 'absorption' (V)	28.8		57.6		
Charge voltage 'float' (V)	27.6		55.2		
MPPT charger maximum efficiency	98%				
MPPT efficiency	> 99.5%				
Protection	a) output short circuit; b) overload; c) battery voltage too high d) battery voltage too low; e) temperature too high; f) input voltage out of range				

General Data

Main Output (AC Out1) Current (A)	32				50
Auxiliary Output (AC Out2) Current (A)	32				
Transfer time	0ms (<15ms in Weak AC source Mode)				
Remote on-off	Yes				
Programmable relay	2x				
Protection	a) output short circuit; b) overload; c) battery voltage too high; d) battery voltage too low; e) temperature too high; f) input voltage out of range;g) input voltage ripple too high; h) Fan block				
CAN Bus communication port	For three phase operation, remote monitoring and system integration				
General purpose com. Port	RS485 (Bluetooth, GPRS, WLAN optional)				
Operating temperature range	-20°C~65°C				
Relative humidity in operation	95% without condensation				
Altitude (m)	2000				

Mechanical Data

Dimension (mm) (max)	499 x 272 x 145				550 x 320 x 145
Net weight (kg)	17		20		33
Cooling	Forced fan				
Protection index	IP21				

Standards

Safety	EN-IEC 62477-1, EN-IEC 62109-1, EN-IEC 62109-2
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-3-11, EN61000-3-12