

Advanced All in One Solar Inverter

APOLLO MAXX

2KW-5KW

With parallel and three phase capability



Apollo Maxx is a powerful all-in-one solar inverter combining a high-performance inverter, battery charger, an MPPT solar charge controller and a high-speed automatic transfer switch in a compact casing, designed with zero transfer time perfect for critical devices such as servers and ATMs, to ensure uninterrupted power supply all the time. So it is mainly for backup power and off-grid applications. The transformer-based design makes it worry-free to start up motor loads, such as fridges, freezes, water pumps and air-conditioners, etc.

It's capable to expand system capacity up to 30KW with 6 units in parallel and three-phase operation. Thanks to its power assist and power control function, it works well with limited AC sources such as generators or limited grid. Apollo Maxx can automatically adjust its charging current by taking loads into account to protect the AC source from overload. Once the temporary peak power appears, it can also discharge the battery to supply power to compensate the insufficient part of the limited AC source.

- Transformer-based design and high surge capacity for all kinds of heavy loads
- All in one, plug and play design for easy installation
- Applicable for DC Coupled PV system, solar hybrid system and power backup system
- Support parallel and three-phase operation up to 30KW with 6 units
- Typical 0~2ms UPS class transfer time
- Power assist function enables limited AC to power heavy loads
- Support automatically start or stop the generator (AGS Function) according to load power, battery voltage/SOC, time period
- Compatible with mainstream lithium battery brands
- TBB premium II battery charging management
- Built-in battery SOC estimation
- Equalization charging program available for flooded and OPzV battery
- Extremely high inverter efficiency up to 96%, MPPT efficiency up to 98%
- Extremely low self-consumption power
- Remote monitoring and control via Nova Web & App
- Fully programmable by APP



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 range	175~265VAC (45~65Hz)				
AC input Current (transfer switch) (A)	32			50	

Inverter

Nominal battery voltage / Input voltage	24V / 21~34V		48V / 42~68V		
AC output voltage (VAC) / Frequency (Hz)	220/230/240 ± 2% / 50/60 ± 0.1%				
Harmonic distortion	< 2%				
Load Power factor	1.0				
Cont. output power at 25°C (VA)	2000	3000	2000	3000	5000
Peak power (30min) (W)	2000	3000	2000	3000	5000
Cont. Output power at 25°C (W)	1600	2500	1600	2500	4000
Peak power (5 sec) (W)	6000	9000	6000	9000	15000
Surge	300%				
Maximum efficiency	94%	94%	95%	95%	96%
Zero load power (W)	11	14	11	14	18

Charger

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

Solar Charge Controller

Max output current(A)	60	60	60	60	90
Maximum PV power (W)	2000	2000	4000	4000	6000
PV open circuit voltage /MPPT voltage	150V / 65~145V				
Max.PV short circuit current (A)	18	18	35	35	54
Charge voltage 'absorption' (V) / 'float' (V)	28.8 / 27.6		57.6 / 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 (GPRS,WLAN optional with Kinerary)				
Operating temperature range	-20°C~65°C				
Relative humidity in operation	95% without condensation				
Altitude (m)	2000				

Mechanical Data

Dimension (mm) (max)	499x272x144			570x310x154	
Net weight (kg)	17	20	17	20	32
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				