



INV030 | INV041

APOLLO MAXX

3.0S

48V/3kW/60A/150V

5.0S

48V/5kW/90A/150V

OVERVIEW

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 uninterpretable 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, 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.

FEATURES & BENEFITS

- 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
- Equilisation charging program available for flooded and OPZS 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

OFF GRID INVERTERS

APOLLO MAXX	3.0S	5.0S
Product Code	INV030	INV041
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)	48V / 42-68V	
AC output voltage(VAC)	220/230/240 ± 2%	
AC output Frequency(Hz)	50/60 ± 0.1%	
Harmonic distortion	<2%	
Load Power factor	1	
Cont. output power at 25°C (VA)	3000	5000
Cont. output power at 25°C (W)	2500	4000
Peak power(30 min)(W)	3000	5000
Peak power(5 sec)(W)	9000	15000
Surge	300%	
Maximum efficiency	95%	96%
Zero load power (W)	14	18
CHARGER		
Charge voltage 'absorption' (V)	57,6	
Charge voltage 'float' (V)	55,2	
Battery types	AGM / GEL / OPzV / Lead-Carbon / Li-ion / Flooded / Traction / TBB SUPER-L	
Max AC charge current (A)	40	70
Temperature compensation	Yes	
SOLAR CHARGE CONTROLLER		
Max output current(A)	60	90
Maximum PV power(W)	4000	6000
PV open circuit voltage (V)	150	
MPPT voltage range(V)	65~145	
Max. PV short circuit current (A)	35	54
Charge voltage 'absorption' (V)	57,6	
Charge voltage 'float' (V)	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 Kinergy)	
Operating temperature range	-20°C to 65°C	
Relative humidity in operation	95% without condensation	
Altitude (m)	2000	
MECHANICAL DATA		
Dimension (mm) (max)	499*272*144	570*310*154
Net Weight (kg)	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	
Warranty	2 Years + 1 Year*	

*Add 1 Year to your warranty when you link your product to the NOVA App