

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-performance true 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 DC coupling system, power backup system 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.

- Transformer Based
- All in one, plug and play design for easy installation
- Can be applied for DC coupling system, solar hybrid system and power backup system
- Parallel and three phase capability
- Typical 0ms UPS class transfer speed, max<2ms
- Power assist & Power control to minish generator size & meet Grid limited
- 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
- TBB 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 |
| Max output power at 25°C (W) | 2000 | 3000 | 2000 | 3000 | 5000 |
| Peak power (W) for 5 sec | 6000 | 9000 | 6000 | 9000 | 15000 |
| Maximum efficiency | 94% | 94% | 95% | 95% | 96% |
| Zero load power (W) | 11 | 14 | 11 | 14 | 21 |

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 144 | | | 570 x 310 x 154 | |
| 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 | | | | |