

MN15-12KW-AIO

ALL IN ONE INVERTER SYSTEM



The new MidNite **MN15-12KW-AIO** All in One inverter is a testament to innovation coming from a company that you have known and trusted for many years as an industry leader. The MidNite All in One (AIO) is a 10,000 watt system that features three powerful MPPT charge controllers and three 120/240VAC programmable outputs that can be utilized for load shedding or opportunity loads. The MidNite AIO employs features not found in other AIO inverters following the MidNite legacy of providing industry shaping products.

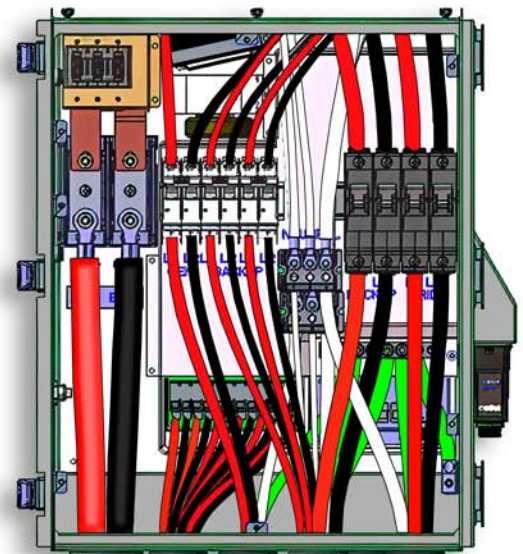
The AIO's 3 integrated 120/240VAC outputs can replace an external programmable distribution box saving you thousands in installation costs. Heavy use loads can be controlled based on user defined parameters. The MidNite AIO provides customizable settings to tailor your system to perfectly to your electrical needs a flexibility not offered by any existing All in One inverter on the market.

The AIO's 3 MPPT inputs are capable of utilizing the full 600vdc allowed by the NEC. Most All in One inverters only have an MPPT window up to 500vdc. The AIO takes advantage of the full allowable 600vdc allowing you more powerful arrays to meet your usage demands.

Real time monitoring through our web based app allows you to view your system and alter settings from anywhere in the world while our built in display allows for programming without the need of an external device. MidNite is committed to providing innovative reliable products to the solar industry with ongoing adaptations based on customer demand.

Standard features:

- 30A, 50A & 60A 120/240VAC branch circuit breakers with programmable relays for load shedding etc
- UL1741SB sell to grid, self consumption with CT's or Off grid mode
- Residential and commercial
- Up to 200% oversizing allowed with 3 MPPTs
- Supports up to 30A PV input current
- Supports AC coupling
- Supports self-consumption
- Our standard Battery Temp Sensor included with every inverter
- Arc Fault, Ground Fault and Rapid shut down included
- 100A AC pass through with input and output breakers for NEC compliance
- All AC and DC breakers are Magnetic Hydraulic allowing for 100% continuous duty
- 250 Amp CBI Magnetic Hydraulic battery breaker
- Supports 40-64VDC Lithium or Lead-acid battery
- Maximum battery charge/discharge current of 210A
- Stable Output Power
- Continuous 110% of nominal AC power (11,000W)
- Supports 120/240/208VAC connections
- Seamless backup transition (<10ms)
- Stackable up to 9 units
- Standby generator connection for whole-home back up
- Remote configuration and upgrade
- 10 year warranty



MN15-12KW-A/O



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SPECIFICATIONS

Max. Efficiency (PV to AC)	98.0%
Max. Efficiency (BAT to AC)	94.5%
Max. PV Input Power	15,000W Max.
PV Voltage	600V
Start-up Voltage	90V
MPPT Operating Voltage Range	70V-550V
Max. Input Current per MPPT	30A/22A/22A
String (per MPPT)	6(2/2/2)
Number of MPPT's	3
Battery Type	Lithium-ion/Lead-acid or other
Nominal battery voltage	48V
Battery voltage range	40V-64V
Max. charge/discharge current	210A/210A
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz (Adjustable)
Power Factor	> 0.99 @rated power (Adjustable 0.8 LG - 0.8 LD)
THDI	<3% (Rated Power)
Nominal Output Power	10,000W (11,000W continuous)
Nominal Output Current	47.5A/47.5A
Peak Output Apparent Power(1s)	20,000VA
Nominal Output Voltage	120/240V (Split phase) / 208V (2/3 phase)
Nominal Output Frequency	50 Hz /60Hz
Transfer Time	<10ms
THDV	<3% @100% R Load
DC Switch	YES
AC Overcurrent Protection	YES
DC/AC Overvoltage Protection	DC Type II, AC Type III
AC Short Circuit Protection	YES
DC Reverse connection	YES
Surge Arrester	DC Type II, AC Type II
Insulation Resistance Detection	YES
Leakage Current Protection	YES
AFCI	YES
RSD	Yes (APsystems Sunspec)
Generator	YES
Max. Operation Altitude	6500FT / 2000M
Ingress Protection Degree	IP65/NEMA 3R
Operating Temperature Range	-25~60C(>450 derating)
Relative Humidity	0~100%
Cooling Method	Fan Cooling
Mounting	Wall bracket
Dimensions (W*H*D)	16.5W x 38.3L x 10.27D inch (420mm x 973mm x 261mm)
Weight	44.45Kg/98lb
PV Connection Way	Terminals
Display	Wireless & APP + LED , LCD (optional)
Communication Interface	RS485/CAN (for BMS), DRM/RS485 (for meter), RS485
Optional:	WiFi /LAN
Agency Approvals	UL1741SB, IEEE1547: 2018, HECO SRD 2.0 UL 1741/CSA C22.2/UL 1699B
EMC	FCC Part 15 Class B
Warranty	10 Years