

# Single Phase Off-grid Inverter XN1.5-8kW



High frequency  
Isolation



AC bypass charging



Multiple charging  
voltage settings



Multiple working  
modes



Support non-linear  
load



200% AC overload



Support Bluetooth  
Connection



Wide input voltage  
range



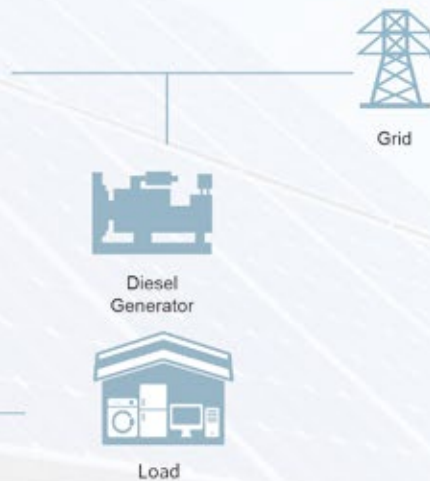
Removable LCD/Fan



parallel  
connection



Single Phase Off-grid Inverter



|                                       | XN15IM-24   | XN30IM-24          | XN50IM-48      |
|---------------------------------------|---|--------------------|----------------|
| Rated Power                           | 1.5kVA / 1.5kW  | 3kVA / 3kW         | 5kVA / 5kW     |
| <b>Input (AC)</b>                     |   |                    |                |
| Max. input Voltage                    | 230Vac  |                    |                |
| Selectable Voltage Range              | 170Vac ~ 280Vac (for personal computers); 90Vac ~ 280Vac (for home appliances)  |                    |                |
| Rated Frequency                       | 50Hz / 60Hz (auto-sensing)  |                    |                |
| <b>Output (AC)</b>                    |   |                    |                |
| AC Voltage Regulation(Batt. Mode)     | 230Vac±5%   |                    |                |
| Surge power                           | 3kVA  | 6kVA               | 10kVA          |
| Efficiency                            | 90% ~ 93%   |                    |                |
| Transfer Time                         | 10ms (for personal computers); 20ms (for home appliances)   |                    |                |
| Waveform                              | Pure Sine Wave  |                    |                |
| Capacity to load air conditioner      | 0.75KVA / 0.75kW  | 1KVA / 1kW         | 1.7KVA / 1.7kW |
| <b>Battery</b>                        |   |                    |                |
| Battery Voltage                       | 24Vdc   |                    | 48Vdc          |
| Floating                              | 27Vdc   |                    | 54Vdc          |
| Overcharge Protection                 | 33Vdc   |                    | 63Vdc          |
| Battery reverse polarity protection   | Fuse  |                    |                |
| <b>Solar Charger &amp; AC Charge</b>  |   |                    |                |
| Max. Input Current                    | 18A   |                    |                |
| Solar Charger Type                    | MPPT  |                    |                |
| Maximum PV Array Power                | 2kW   | 4kW                | 5kW            |
| MPP Range @ Operating Voltage         | 120Vdc ~ 380Vdc   | 120Vdc ~ 450Vdc    |                |
| Maximum PV Array Open Circuit Voltage | 400Vdc  | 500Vdc             |                |
| Maximum Solar Charger Current         | 60A   | 100A               |                |
| Maximum AC Charger Current            | 40A   | 100A               |                |
| Maximum Charger Current               | 60A   | 100A               |                |
| <b>Protection</b>                     |   |                    |                |
| Protection                            | AC short circuit protection, AC over current protection, Output over voltage protection, Over temperature protection.       |                    |                |
| <b>Communication</b>                  |   |                    |                |
| Display                               | LCD   |                    |                |
| Communication                         | USB / RS232 / RS485 / Bluetooth / Dry Contact   |                    |                |
| <b>Standard Compliance</b>            |   |                    |                |
| Safety / EMC                          | IEC 62109-1:2010, IEC 62109-2:2011, EN 55032:2015, EN 61000-3-12:2011, EN 61000-3-11:2000, EN 55024:2010+A1:2015, IEC 61683 |                    |                |
| <b>General Data</b>                   |   |                    |                |
| Dimensions (W x H x D)                | 280 x 390 x 100 mm  | 300 x 400 x 115 mm |                |
| Weight                                | 8.5kg   | 9kg                | 10kg           |
| Operating Temperature                 | -10° C ~ +50° C   |                    |                |
| Storage Temperature                   | -15° C ~ +60° C   |                    |                |
| Cooling Method                        | Smart Cooling   |                    |                |
| Protection Degree                     | IP21  |                    |                |
| Noise                                 | <55dB   |                    |                |
| Altitude                              | <2000m  |                    |                |
| Relative Humidity                     | 5%-95% (non-condensing)   |                    |                |



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| XN50PIII-48                              |   |
|--|---|
| Rated Power                              | 5 kVA / 5 kW  |
| <b>Input (AC)</b>                        |   |
| Max. Input Voltage                       | 230 Vac   |
| Selectable Voltage Range                 | 170Vac ~ 280Vac (for personal computers); 90Vac ~ 280Vac (for home appliances)  |
| Frequency Range                          | 50 Hz / 60 Hz (auto sensing)  |
| <b>Output (AC)</b>                       |   |
| AC Voltage Regulation (Batt. Mode)       | 230Vac ± 5%   |
| Overload Capability                      | ≥ 150s, 5s; 110% ~ 150%, 10s; ≥ 200%, 100ms   |
| Efficiency                               | 90% ~ 93%   |
| Transfer Time                            | 15ms (for personal computers); 20ms (for home appliances)   |
| Waveform                                 | Pure Sine Wave  |
| <b>Battery</b>                           |   |
| Battery Voltage                          | 48Vdc   |
| Floating                                 | 54Vdc   |
| Overcharge Protection                    | 66Vdc   |
| Battery Reverse Polarity Protection      | FUSE  |
| <b>Solar Charger and AC Charge</b>       |   |
| Number of MPP Trackers / String per MPPT | 1/1   |
| Solar Charger Type                       | MPPT  |
| Maximum PV Array Power                   | 5kW   |
| MPP Range@ Operating Voltage             | 120Vdc ~ 450Vdc   |
| Maximum PV Array Open Circuit Voltage    | 450Vdc  |
| Maximum Solar Charger Current            | 100A  |
| Maximum AC Charger Current               | 100A  |
| Maximum Charger Current                  | 100A  |
| Number of Parallel                       | 9   |
| <b>Protection</b>                        |   |
| Protection                               | AC short circuit protection, AC over current protection, Output over voltage protection, Over temperature protection. |
| <b>Communication</b>                     |   |
| Display                                  | LCD   |
| Communication                            | USB / RS232 / RS485 / Bluetooth   |
| <b>Standard Compliance</b>               |   |
| Safety / EMC                             | IEC 62109-1:2010, IEC 62109-2:2011, EN 61000-6-2:2005, EN 61000-6-4:2007/A1:2011, IEC 61683                           |
| <b>General Data</b>                      |   |
| Dimensions (W x H x D)                   | 295 x 468 x 140 mm  |
| Weight                                   | 12kg  |
| Operating Temperature                    | -10° C ~ +50° C   |
| Storage Temperature                      | -15° C ~ +60° C   |
| Cooling Method                           | Smart Cooling   |
| Protection Degree                        | IP21  |
| Noise                                    | <55dB   |
| Altitude                                 | <2000m  |
| Relative Humidity                        | 5% ~ 95% (non-condensing)   |



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|                                       | XN30PK-48   | XN50PK-48      |
|---------------------------------------|---|----------------|
| Rated Power                           | 3kVA / 3kW  | 5kVA / 5kW     |
| <b>Input (AC)</b>                     |   |                |
| Rated Input Voltage                   | 230Vac  |                |
| Selectable Voltage Range              | 170Vac ~ 280Vac (for personal computers); 90Vac ~ 280Vac (for home appliances)  |                |
| Rated Frequency                       | 50Hz / 60Hz (auto-sensing)  |                |
| <b>Output (AC)</b>                    |   |                |
| AC Voltage Regulation(Batt. Mode)     | 230Vac±5%   |                |
| Surge power                           | 6kVA  | 10kVA          |
| Efficiency                            | 90% ~ 93%   |                |
| Waveform                              | 10ms (for personal computers) ; 20ms (for home appliances)  |                |
| Capacity to load air conditioner      | Pure Sine Wave  |                |
| <b>Battery</b>                        |   |                |
| Battery Voltage                       | 24Vdc   | 48Vdc          |
| Floating                              | 27Vdc   | 54Vdc          |
| Overcharge Protection                 | 33Vdc   | 60Vdc          |
| <b>Solar Charger &amp; AC Charge</b>  |   |                |
| Solar Charger Type                    | MPPT  |                |
| Maximum PV Array Power                | 145Vdc  |                |
| MPP Range @ Operating Voltage         | 1.5kW   | 3kW            |
| Maximum PV Array Open Circuit Voltage | 30Vdc ~ 115Vdc  | 60Vdc ~ 115Vdc |
| Maximum Solar Charger Current         | 80A   |                |
| Maximum AC Charger Current            | 60A   |                |
| Maximum Charger Current               | 140A  |                |
| <b>Protection</b>                     |   |                |
| Protection                            | AC short circuit protection, AC over current protection, Output over voltage protection, Over temperature protection        |                |
| <b>Communication</b>                  |   |                |
| Display                               | LCD   |                |
| Communication                         | USB / RS232   |                |
| <b>Standard Compliance</b>            |   |                |
| Safety / EMC                          | IEC 62109-1:2010, IEC 62109-2:2011, EN 55032:2015, EN 61000-3-12:2011, EN 61000-3-11:2000, EN 55024:2010+A1:2015, IEC 61683 |                |
| <b>General Data</b>                   |   |                |
| Dimensions (W x H x D)                | 300 x 440 x 100 mm  |                |
| Weight                                | 9.5KG   | 12.5KG         |
| Operating Temperature                 | -10° C ~ +50° C   |                |
| Storage Temperature                   | -15° C ~ +60° C   |                |
| Cooling Method                        | Smart Air Cooling   |                |
| Protection Degree                     | IP21  |                |
| Noise                                 | <55dB   |                |
| Altitude                              | 0~2000m   |                |
| Relative Humidity                     | 5%-95% (non-condensing)   |                |



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| XN80PA-48                             |  |
|---------------------------------------|--|
| Rated Power                           | 8kVA / 8kW   |
| <b>Input (AC)</b>                     |  |
| Rated Input Voltage                   | 230Vac   |
| Selectable Voltage Range              | 170Vac ~ 280Vac (for personal computers); 90Vac ~ 280Vac (for home appliances)   |
| Rated Frequency                       | 50Hz / 60Hz (auto-sensing)   |
| <b>Output (AC)</b>                    |  |
| AC Voltage Regulation (Batt. Mode)    | 230Vac ±5%   |
| Surge power                           | 16kVA  |
| Efficiency                            | 90% ~ 93%  |
| Transfer Time                         | 15ms (for personal computers); 20ms (for home appliances)  |
| Waveform                              | Pure Sine Wave   |
| DC Voltage (Optional)                 | 12Vdc ±5%, 100W  |
| No load Power Consumption             | < 70W  |
| <b>Battery</b>                        |  |
| Battery Voltage                       | 48Vdc  |
| Floating                              | 54Vdc  |
| Overcharge Protection                 | 66Vdc  |
| Battery reverse polarity protection   | Fuse   |
| <b>Solar Charger &amp; AC Charge</b>  |  |
| Solar Charger Type                    | MPPT   |
| Maximum PV Array Power                | 8kW  |
| MPP Range @ Operating Voltage         | 90Vdc ~ 450Vdc   |
| Maximum PV Array Open Circuit Voltage | 500Vdc   |
| Maximum Solar Charger Current         | 150A   |
| Maximum AC Charger Current            | 120A   |
| Maximum Charger Current               | 150A   |
| <b>Protection</b>                     |  |
| Protection                            | AC short-circuit protection, AC over-current protection, Output over-voltage protection, Over-temperature protection, etc. |
| <b>Communication</b>                  |  |
| Display                               | LCD  |
| Communication                         | USB / RS232 / RS485 / WiFi / Dry Contact   |
| <b>Standard Compliance</b>            |  |
| Safety / EMC                          | CE   |
| <b>General Data</b>                   |  |
| Dimensions (W x H x D)                | 432.5 x 553.6 x 147.4 mm   |
| Weight                                | 18.4kg   |
| Operating Temperature                 | -10° C ~ +50° C  |
| Storage Temperature                   | -15° C ~ +60° C  |
| Cooling Method                        | Smart Air Cooling  |
| Protection Degree                     | IP21   |
| Noise                                 | <60dB  |
| Altitude                              | 0~2000m  |
| Relative Humidity                     | 5%-95% (non-condensing)  |



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