

PRELIMINARY

# blueplanet 3.0 + 5.0 NX3

3-phase, multi-MPPT inverters  
for small residential solar PV plants



## Get ready for the next generation.

Functional, robust design  
offers easy and flexible ways  
of installation

User-friendly apps for Wi-Fi setup  
and monitoring

Integrated DC-switch, Sunclix  
connectors



| DC input data                             | 3.0 NX3   | 5.0 NX3  |
|---|---|--|
| Max. recommended PV generator power       | 4 500 W   | 7 500 W  |
| MPP range@rated power                     | 150 – 1000 V  | 150 – 1000 V   |
| Operating range                           | 125 – 1100 V  | 125 – 1100 V   |
| Rated DC voltage / start voltage          | 630 V / 180 V   | 630 V / 180 V  |
| Max. no-load voltage                      | 1100 V  | 1100 V   |
| Max. input current                        | 2 x 16 A  | 2 x 16 A   |
| Max. short circuit current $I_{sc\ max}$  | 2 x 25 A  | 2 x 25 A   |
| Number of MPP tracker                     | 2   | 2  |
| Connection per tracker                    | 1   | 1  |
| Max. input power per tracker              | 6 200 W   | 6 200 W  |
| AC output data                            |   |  |
| Rated active power                        | 3 000 W   | 5 000 W  |
| Max. apparent power                       | 3 000 VA  | 5 000 VA   |
| Line voltage                              | 220 V / 380 V (3 / 3-N-PE)<br>230 V / 400 V (3 / 3-N-PE)<br>240 V / 415 V (3 / 3-N-PE)  | 220 V / 380 V (3 / 3-N-PE)<br>230 V / 400 V (3 / 3-N-PE)<br>240 V / 415 V (3 / 3-N-PE) |
| Voltage range (Ph-Ph)                     | 160 V – 300 V   | 160 V – 300 V  |
| Rated frequency (range)                   | 50 Hz / 60 Hz (45 – 65 Hz)  | 50 Hz / 60 Hz (45 – 65 Hz)   |
| Max. current                              | 4.8 A   | 8.0 A  |
| Reactive power / cos phi                  | 0.8 overexcited – 0.8 underexcited  | 0.8 overexcited – 0.8 underexcited   |
| Max. total harmonic distortion (THD)      | <3 %  | <3 %   |
| Number of grid phases                     | 3   | 3  |
| General data                              |   |  |
| Max. efficiency                           | 98.2 %  | 98.2 %   |
| Europ. efficiency                         | 97.8 %  | 97.8 %   |
| Standby consumption                       | <1 W  | <1 W   |
| Circuitry topology                        | transformerless   | transformerless  |
| Mechanical data                           |   |  |
| Display                                   | LED indication (status, fault, communication)   | LED indication (status, fault, communication)  |
| Communication Interface                   | WiFi / RS485  | WiFi / RS485   |
| DC connection                             | DC plugs (Phoenix Contact Sunclix)  | DC plugs (Phoenix Contact Sunclix)   |
| AC connection                             | Plug-in Connector   | Plug-in Connector  |
| Ambient temperature                       | -25 °C – +60 °C   | -25 °C – +60 °C  |
| Humidity                                  | 0 – 100 % (non-condensing)  | 0 – 100 % (non-condensing)   |
| Max. installation elevation (above)       | 3 000 m   | 3 000 m  |
| Climatic category (acc. to IEC 60721-3-4) | 4K4H  | 4K4H   |
| Cooling                                   | convection  | convection   |
| Protection class                          | IP65  | IP65   |
| Noise emission                            | <20 db  | <20 db   |
| H x W x D                                 | 503 x 435 x 183 mm  | 503 x 435 x 183 mm   |
| Weight                                    | <16 kg  | <16 kg   |
| Certifications                            |   |  |
| Safety                                    | IEC 62109-1:2010 and -2:2011; EN 62311:2020; EN 61000-3-3:2013; EN 61000-3-11:2000; EN 61000-3-2:2014; EN 61000-3-12:2011; EN IEC 63000:2018          |  |
| EMC                                       | EN 61000-6-2:2005/AC:2005; EN 62920:2017 Class A; EN 61000-6-3:2007 + A1:2011/AC:2012; EN 55011: 2016+A1:2017 group 1, Class B; EN 62920:2017 Class B |  |
| RED                                       | EN 300 328 V2.2.2:2019; EN 301 489-1 V2.1.1/ V2.2.3; EN 301 489-17 V3.2.4   |  |
| Environment Temperature                   | IEC 60068-2-1, 2-2, 2-14, 2-30, 2-75  |  |
| IP-Code                                   | EN 60529:1991/A2:2013/AC:2019-02  |  |
| Efficiency                                | IEC 61683; EN 50530:2013-12   |  |
| Grid connection rule                      | overview see homepage / download area   |  |

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The text and figures reflect the current technical state at the time of printing. Subject to technical changes. Errors and omissions excepted. This current version replaces all older versions. Download the most current version at: [www.kaco-newenergy.com](http://www.kaco-newenergy.com)