

PRELIMINARY

blueplanet 100 NX3 – 125 NX3

Multi-MPPT string inverter for commercial
and industrial photovoltaic systems.



The inverters for the industrial PV revolution.

Flexible multi-MPPT technology
for large-scale PV rooftop
systems

Compatible with high power PV
modules

Early arc detection (optional)

Wireless communication



DC input data	100 NX3 M8	125 NX3 M8
Max. recommended PV generator power	150 000 W	187 500 W
MPP range	550 – 850 V	550 – 850 V
Operating range	200 – 1 000 V	200 – 1 000 V
Rated DC voltage / start voltage	650 V / 250 V	650 V / 250 V
Max. no-load voltage	1 100 V	1 100 V
Max. input current	30 A pro tracker	30 A pro tracker
Max. short circuit current $I_{sc,max}$	37.5 A pro tracker	37.5 A pro tracker
Max. Number of MPP tracker	8	8
Connection per tracker	2	2
AC output data		
Rated output	100 000 VA	125 000 VA @ 400V 120 000VA @ 380V
Max. power	125 000 VA	125 000 VA
Line voltage	400 V (3P+PE)	400 V (3P+PE)
Voltage range (Ph-Ph)	380 – 480 V	380 – 480 V
Rated frequency (range)	50 Hz / 60 Hz (45 – 65 Hz)	50 Hz / 60 Hz (45 – 65 Hz)
Rated current	3 x 144.3 A	3 x 182.0 A
Max. current	3 x 182.0 A	3 x 182.0 A
Reactive power / cos phi	0.80 ind. – 0.80 cap.	0.80 ind. – 0.80 cap.
Max. total harmonic distortion (THD)	≤ 3 %	≤ 3 %
Number of grid phases	3	3
General data		
Max. efficiency	≥ 98.8%	≥ 98.8%
Europ. efficiency	≥ 98.5%	≥ 98.5%
CEC efficiency	≥ 98.5%	≥ 98.5%
Standby consumption	t.b.d	t.b.d
Circuitry topology	transformerless	transformerless
Mechanical data		
Display	LEDs	LEDs
Control units	webserver, supports mobile devices	
Interfaces	Ethernet (Modbus TCP, Sunspec), RS485 (KACO protocol), USB, Wifi (via Wifi Stick)	
Fault signalling relay	potential-free NOC max. 30 V / 1 A	
DC connection	PV connector (assembly without special tools)	
AC connection	cable lug, max. 240 mm ² (0.372 in ²) Cu or Al	
Ambient temperature	-25 °C – +60 °C ¹⁾	-25 °C – +60 °C ¹⁾
Humidity	0 – 100 %	0 – 100 %
Max. installation elevation (above MSL)	3 000 m	3 000 m
Min. distance from coast	C4 protection class	C4 protection class
Cooling	temperature controlled fan	temperature controlled fan
Protection class	IP66 / NEMA 4X	IP66 / NEMA 4X
Noise emission	≤ 65 db (A)	≤ 65 db (A)
H x W x D	t.b.d	t.b.d
Weight	≤ 90 kg	≤ 90 kg
Certifications		
Safety &EMC	IEC 62109-1/-2, EN 61000-6-1/-2/-4, EN 61000-3-11/-12, EN 55011 group 1, class A EN 62920 Emission class A/Immunity class B	
Grid connection rule	overview see homepage / download area	

¹⁾ Power derating at high ambient temperatures

Options	
Global MPP-tracking	✓
IV-curve analysis (data transfer)	✓
Anti-PID	○
Arc Fault Detection	○

standard = ✓ optional = ○

DC input data		125 NX3 M10
Max. recommended PV generator power		187 500 W
MPP range		550 – 850 V
Operating range		200 – 1 000 V
Rated DC voltage / start voltage		650 V / 250 V
Max. no-load voltage		1 100 V
Max. input current		30 A pro tracker
Max. short circuit current $I_{sc\ max}$		37.5 A pro tracker
Max. Number of MPP tracker		10
Max. Connection per tracker		2
AC output data		
Rated output		125 000 VA @ 400V 120 000VA @ 380V
Max. power		125 000 VA
Line voltage		400 V (3P+PE)
Voltage range (Ph-Ph)		380 – 480 V
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