

PRELIMINARY

## blueplanet hybrid 6.0 – 12.0 NH3 M2

Hybrid inverters for residential and small commercial battery storage and solar PV systems.



### Solar+storage. Quick+easy.

Easy-to-connect battery and smart meter interfaces

Compatible with high-voltage batteries

User-friendly App for set-up, commissioning and monitoring

Superior oversizing capabilities and shade management for higher yields

Ready for bifacial and high power PV modules

# Technical Data

**PRELIMINARY**  
(Data subject to change without prior notice)

PV Input (DC)	hybrid 6.0 NH3 M2	hybrid 8.0 NH3 M2	hybrid 10.0 NH3 M2	hybrid 12.0 NH3 M2
Max. recommended PV generator power	9 000 Wp	12 000 Wp	15 000 Wp	18 000 Wp
No. of independent MPPT trackers / strings per MPPT input	2 / 1	2 / 1	2 / 1	2 / 1
Nom. / max. DC voltage	1100 V DC	1100 V DC	1100 V DC	1100 V DC
Min. input voltage/ start-up voltage	60 V / 250 V DC	60 V / 250 V DC	60 V / 250 V DC	60 V / 250 V DC
MPP range@rated power	150 V DC – 950 V / 600 DC		200 V DC – 950 V / 600 DC	
Max. input current per MPP tracker	20 A	20 A	20 A	20 A
Max. short-circuit current I <sub>sc</sub> max	30 A per input channel			
Overload behaviour	tbd	tbd	tbd	tbd
<b>Efficiency</b>				
MPPT	99.9 %	99.9 %	99.9 %	99.9 %
PV (DC) to grid (AC) [max.]	98.4 %	98.4 %	98.4 %	98.4 %
PV (DC) to grid (AC) [EU]	97.2 %	97.5 %	97.9 %	97.9 %
Battery (DC) to grid (AC) [max.]	97.5 %	97.5 %	97.5 %	97.5 %
Night-time consumption (off)	tbd	tbd	tbd	tbd
Idle state consumption	tbd	tbd	tbd	tbd
<b>Battery Mode Input (DC)</b>				
Max. charge / discharge current	36 A	36 A	36 A	36 A
Rated charging current / rated discharging current	30 A	30 A	30 A	30 A
Battery voltage min. - max.	120 V DC – 600 V DC	120 V DC – 600 V DC	120 V DC – 600 V DC	120 V DC – 600 V DC
Galvanic isolation	no	no	no	no
Nom. charging power/ nom. discharging power	6 000 W	8 000 W	10 000 W	12 000 W
Voltage shape in off-grid mode	true sinus	true sinus	true sinus	
<b>AC Output (Grid Feed-in)</b>				
Nom. power AC	6 000 VA	8 000 VA	10 000 VA	12 000 VA
Max. power AC	6 600 VA	8 800 VA	11 000 VA	13 200 VA
Number of phases	3	3	3	3
Rated AC current (@400V)	8.7 A	11.6 A	14.5 A	17.4 A
Max. AC current (@400V)	9.6 A	12.8 A	16.0 A	19.2 A
Feed-in	sym. / asym.	sym. / asym.	sym. / asym.	sym. / asym.
Nom. AC voltage	220 V / 380 V	220 V / 380 V	220 V / 380 V	220 V / 380 V
	230 V / 400 V	230 V / 400 V	230 V / 400 V	230 V / 400 V
	240 V / 415 V	240 V / 415 V	240 V / 415 V	240 V / 415 V
AC voltage range	270 – 480 V AC	270 – 480 V AC	270 – 480 V AC	270 – 480 V AC
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz			
Power factor	0.8c – 0.8i	0.8c – 0.8i	0.8c – 0.8i	0.8c – 0.8i
Harmonics THDi (@nominal power)	<3 % (of nominal power)			
Topology	transformerless	transformerless	transformerless	transformerless
<b>AC Input</b>				
Max. input power from grid	12 000 W	16 000 W	20 000 W	24 000 W
Max. input current from grid	17.4 A	23.2 A	29.0 A	34.8 A
Rated grid frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	
<b>EPS Output</b>				
Nominal output voltage	220 V / 380 V (3 / N / PE)			
	230 V / 400 V (3 / N / PE)			
	240 V / 415 V (3 / N / PE)			
Nominal output frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Rated apparent power	6 000 VA	8 000 VA	10 000 VA	12 000 VA
Max. output apparent power@linear load	8 000 VA			
Peak output apparent power	2 times of rated power, 10 S			
Rated current (@400V)	8.7 A	11.6 A	14.5 A	17.4 A
Max. switch time	<10 ms	<10 ms	<10 ms	<10 ms
Output THDv (@ Linear load)	2 %	2 %	2 %	2 %
<b>General Data</b>				
Dimensions (W / H / D)	545 x 478 x 205 mm	545 x 478 x 205 mm	545 x 478 x 205 mm	545 x 478 x 205 mm
Device weight	26 kg	26 kg	26 kg	26 kg
Operating temperature range	-25 °C – +60 °C	-25 °C – +60 °C	-25 °C – +60 °C	-25 °C – +60 °C
Noise emissions (typical)	30 dB(A)	30 dB(A)	30 dB(A)	30 dB(A)
Cooling concept	natural convection	natural convection	natural convection	natural convection
Standby consumption	<5 W	<5 W	<5 W	<5 W
Degree of protection (as per IEC 60529)	IP66	IP66	IP66	IP66
Climatic category (according to IEC 60721-3-4)	4K4H	4K4H	4K4H	4K4H
Max. permissible installation humidity	100 % (non-condensing)			
Max. operating altitude	4000 m (>3000 m power derating)			

Connections	hybrid 6.0 NH3 M2	hybrid 8.0 NH3 M2	hybrid 10.0 NH3 M2	hybrid 12.0 NH3 M2
DC connection for battery with automatic cut-off point				PhoenixContact Sunclix
DC connection for PV				PhoenixContact Sunclix
AC connection				5-Pole PhoenixContact
selma01	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>	4 mm <sup>2</sup>
Features				
DC surge protection (type II, according to EN/IEC 61643-11) / AC surge protection type III	●/●	●/●	●/●	
Insulation resistor detection	●	●	●	
PV over voltage protection	●	●	●	
PV string input reverse polarity protection	●	●	●	
Battery over / under voltage protection	●/●	●/●	●/●	
Over-temperature protection	●	●	●	
Residual current monitoring unit	●	●	●	
AC short circuit protection	●	●	●	
Anti-islanding protection	●	●	●	
User interface	LED & App	LED & App	LED & App	LED & App
Communication with BMS	CAN	CAN	CAN	CAN
Communication with meter	RS485	RS485	RS485	RS485
Communication with portal	Wifi / 4G / LAN	Wifi / 4G / LAN	Wifi / 4G / LAN	Wifi / 4G / LAN
Digital output (dry contact) NO. of inputs	●/2	●/2	●/2	●/2
Digital input (dry contact) NO. of inputs	●/4	●/4	●/4	●/4
Integrated power control / zero export control	smart meter	smart meter	smart meter	smart meter
Supported Devices				
Energy storage	LiFePO4	LiFePO4	LiFePO4	LiFePO4
Compatible battery	Dyness, Pylontech, BYD			
Energy Conversion Modes				
Grid parallel self consumption	●	●	●	●
Grid parallel emergency power supply mode	●	●	●	●
Off-Grid island mode	●	●	●	●
Grid parallel integration of AC coupled power source	●	●	●	●
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			
Grid connection rule	overview see homepage / download area			

