

Three-Phase Hybrid Inverter



X3-NEO-LV

5.0kW / 8.0kW / 10.0kW / 12.0kW / 15.0kW



High-efficiency

- 200% PV oversized and up to 110% AC output
- 200% peak EPS apparent power, 10s
- Built-in shadow tracking^①



Intelligent

- Single unit UPS-level switching time < 4ms (Typical)
- CT compatible, loads respond within 0.3s
- Max. 10 units parallel for on-grid and off-grid operation^②
- Max. charging / discharging current of 300A
- Generator compatible^③



Safe

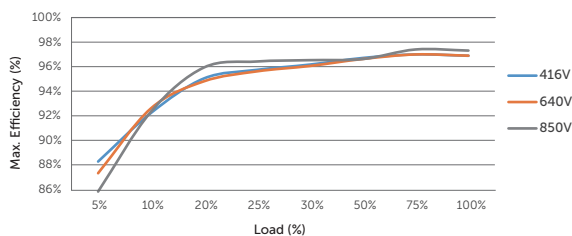
- IP65 protection degree
- Integrated SPD
- AFCI protection(optional)



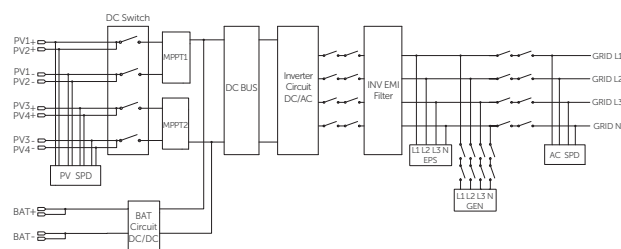
Economical

- Max. DC input current 18A per channel, supports high power solar panels
- Low start up voltage brings longer operation time

Efficiency Curve (15kW)



Circuit Diagram



DC INPUT					
Max. PV Input Power [Wp] ^④	10000	16000	20000	24000	30000
Max. PV Input Voltage [V] ^⑤	1000				
Start Output Voltage [V]	150				
Nominal Input Voltage [V]	640				
Operating Voltage Range [V] ^⑥	160 ~ 950				
MPPT Voltage Range [V]	160 ~ 950				
No. of MPPT / Strings per MPPT	2 / (1 / 1)		2 / (2 / 1)	2 / (2 / 2)	
Max. Input Current [A] ^⑦	18 / 18		36 / 18	36 / 36	
Max. Short Circuit Current [A]	25 / 25		50 / 25	50 / 50	
AC INPUT & OUTPUT					
Nominal AC Output Power [W]	5000	8000	10000	12000	15000
Max. AC Output Apparent Power [VA]	5500	8800	11000	13200	16500
Max. AC Output Current [A]	8.4	13.4	16.8	20.0	25.0
Max. AC Input Apparent Power [VA]	10000	16000	20000	24000	30000
Max. AC Input Current [A]	15.2	24.3	30.4	36.4	45.5
Nominal AC voltage [V], Frequency[Hz]	3L / N / PE; 220 / 380, 230 / 400; 50 / 60				
Displacement Power Factor	0.8 leading ~ 0.8 lagging				
THDi (rated power) [%]	< 3				
BATTERY DATA					
Battery Type	Lithium / Lead-Acid				
Battery Voltage Range [V]	40 ~ 60				
Nominal Battery Voltage [V]	48				
Max. Charging / Discharging Current [A]	125	200	250	280	300
EPS OUTPUT (WITH BATTERY)					
Nominal output power [W]	5000	8000	10000	12000	15000
Peak Apparent Power [VA , s] ^⑧	10000, 10	16000, 10	20000, 10	24000, 10	30000, 10
Nominal AC Output Current[A]	7.2	11.6	14.5	17.4	21.7
Nominal Voltage [V], Frequency [Hz]	220 / 380, 230 / 400, 50 / 60				
Switch Time [ms]	< 4				
THDv (linear load) [%]	< 2				
SYSTEM DATA					
MPPT Efficiency [%]	> 99.9				
Max. Efficiency [%]	97.6				
Euro. Efficiency [%]	97.0				
ENVIRONMENT LIMIT					
Degree of Protection	IP65				
Operating Temperature Range [°C]	-25 ~ +60 (derating above +45)				
Relative Humidity [%]	4 ~ 100 (condensing)				
Max. Operation Altitude [m]	< 3000				
Storage Temperature [°C]	-25 ~ +70				
Noise Emission (typical) [dB]	≤ 55				
GENERAL					
Dimensions(WxHxD) [mm]	520 x 705 x 258				
Net Weight [kg]	44.6				
Cooling Concept	Smart Cooling				
Topology	Non-isolated				
HMI / Communication Interfaces	LED+LCD / CAN, RS485, CT, Meter, USB, NTC, WIFI+LAN				
Warranty [years]	5				
STANDARD					
Safety	EN IEC 62109-1 / -2				
EMC	EN61000-6 / 1 / 2 / 3 / 4				
Certification	NRS 097-2-1, IEC 61727, IEC 62116, PEA, MEA, BIS				

① ② ③ To be released in Q4 2024;

④ Derating occurs above +45°C, reducing the maximum PV input power

⑤ The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter

⑥ Input voltage exceeding the operating voltage range may triggers inverter protection

⑦ When one MPPT has two string inputs, if both strings are connected to the PV, the maximum current per string must not exceed 18A. If only one PV string is connected, the maximum current per string must not exceed 20A.

⑧ Depend on PV and battery capacity

*V1.0 Information may be subject to modify without notice.

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