High voltage hybrid inverter

PIX 5KHW3P

Three-phase Grid-connected • Battery backup • Hybrid energy management

5 kW	7.5 kW	5.5 kVA
RATED AC OUTPUT	MAX. PV INPUT POWER	MAX. AC APPARENT POWER

KEY FEATURES

01	Three-phase high-voltage hybrid	400/380 V three-phase output; compatible high-voltage lithium battery system.
02	PV oversizing	Maximum PV input power up to 7.5 kW for the reference model.
03	Backup power	Dedicated backup output; switching time listed as less than 10 ms in the reference datasheet.
04	Flexible installation	Two MPPT trackers, IP66 enclosure and support for up to 10 units in parallel.
05	Grid support	Three-phase unbalanced output support and adjustable power factor, per manufacturer reference.

APPLICATION

For residential and small commercial solar installations combining PV generation, high-voltage battery storage and backup power. Verify site grid-code requirements, battery compatibility and system design before installation.



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TECHNICAL SPECIFICATIONS

PV INPUT

Parameter	Unit	Specification
Maximum DC input power	W	7500
Maximum DC input voltage	V	1000
Rated DC input voltage	V	620
Start-up voltage	V	160
MPPT voltage range	V	160–950
Maximum input current	A	18 / 18
Maximum short-circuit current	A	23 / 23
Number of MPPT trackers	—	2
Strings per MPPT tracker	—	1 / 1

AC OUTPUT — GRID

Parameter	Unit	Specification
Rated output power	W	5000
Maximum output apparent power	VA	5500
Rated output voltage	V	400 / 380, 3L/N/PE
Rated output frequency	Hz	50 / 60
Maximum output current	A	8.3
Current THDi	—	<2%
Output power factor	—	Adjustable ±0.8

AC OUTPUT — BACKUP / OFF-GRID

Parameter	Unit	Specification
Rated backup output power	VA	5000
Maximum backup output current	A	7.6
Switching time	ms	<10
Output voltage	V	400 / 380, 3L/N/PE
Output frequency	Hz	50 / 60
Voltage THDv	—	3%

BATTERY PARAMETERS

Parameter	Unit	Specification
Battery type	—	Lithium
Battery voltage range	V	160–700
Maximum charge power	W	5000
Maximum discharge power	W	5000
Maximum charge/discharge current	A	30 / 30
BMS communication	—	CAN / RS485

EFFICIENCY

Parameter	Unit	Specification
Maximum efficiency	—	98.0%
European efficiency	—	97.2%
MPPT efficiency	—	99.9%

PROTECTION & GENERAL

Parameter	Unit	Specification
Ingress protection	—	IP66
Topology	—	Transformerless
Parallel operation	—	Up to 10 units
Cooling	—	Natural / fan (mode dependent)
Display	—	LCD
Communication	—	Wi-Fi / RS485 / CAN (BMS)
Operating temperature	°C	–25 to +60
Storage temperature	°C	–30 to +65
Humidity	%	0–95
Operating altitude	m	<3000
Dimensions (W × H × D)	mm	520 × 400 × 230
Compatible batteries	—	Austa Lih series; Pylontech Force H1/H2 and Powercube series
Safety / EMC	—	EN 62109-1/2; EN IEC 61000-6-1/2/3/4
Grid standards	—	DIN VDE V 0124-100; VDE-AR-N 4105; EN 50549-1; CEI 021/016; NC RFG

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