Low Voltage Hybrid Inverter

PIX 3.6KLW1P

Single-phase Battery backup Grid-connected / off-grid operation

3.6 kW	5.4 kW	90 A
RATED AC OUTPUT	MAX. PV INPUT POWER	MAX. BATTERY CHARGE / DISCHARGE

KEY FEATURES

01	**Dual MPPT architecture**	Two MPP trackers; one string per tracker as listed in supplied technical data.
02	**Low-voltage battery support**	48 V nominal battery; lithium or lead-acid compatibility listed in source data.
03	**Two backup outputs**	Backup output power up to 3.6 kW per backup output; peak apparent output 7.2 kVA / 15 s.
04	**Outdoor-ready enclosure**	IP66 protection rating; operating temperature -25°C to 60°C.
05	**Multiple communication options**	RS485 / CAN / WiFi / Ethernet / 4G listed in source data.

DESIGNED FOR

Residential and small commercial solar systems requiring solar PV conversion, low-voltage battery integration, and backup power capability. Confirm final system compatibility and installation requirements against the approved product documentation.



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TECHNICAL SPECIFICATIONS

Electrical, battery, efficiency, protection and environmental data

PV INPUT

Parameter	Unit	Specification
Max. DC input power	W V	5400 500
Max. DC input voltage	V V	150–450 125
MPPT voltage range	A A	18/18
Starting voltage	—	22.5/22.5 2 1
Max. input current	—	
Max. short circuit current		
Number of MPP trackers		
Strings per MPP tracker		

AC OUTPUT (GRID)

Parameter	Unit	Specification
Rated output power	W	3600 3960 220/230/240 50/60
Max. output apparent	VA	18 <3%
power Rated output voltage	V	~1 (-0.8 leading to +0.8
Rated output frequency	Hz	lagging)
Max. output current THDi	A —	
Output power factor	—	

AC OUTPUT (TWO BACKUP)

Parameter	Unit	Specification
Full max. output power	W	3600
Max. output apparent power	VA, sec	7200, 15 220/230
Rated output voltage	V Hz W	50/60 (±0.2%) 3600 3600
Rated output frequency	W —	1 (~0.8 leading to 0.8 lagging)
Backup 1 max. output power		THD <3% (nonlinear load); THD <1.5% (linear load)
Backup 2 max. output power		
Output power factor (off grid)		
Output current harmonic		

BATTERY PARAMETERS

Parameter	Unit	Specification
Battery type	— V	Lithium or lead acid
Rated battery voltage	V A	battery 48 44–57 90
Voltage range	—	CAN/RS485
Max. charge/discharge		
current BMS communication		

EFFICIENCY

Parameter	Unit	Specification
Max. efficiency (PV)	—	97.6% 94.5%
Max. efficiency	—	97%
(cell) European	—	

PROTECTION

Parameter	Unit	Specification
PV input reverse polarity	—	Yes Yes Yes
protection PV insulation resistance	—	Yes Yes Yes
detection Residual current	—	
detection	—	
Output over current protection	—	
Output short circuit protection	—	

OTHERS

Parameter	Unit	Specification
Operating temperature	°C	-25 to 60
range Storage temperature	°C	-30 to 65 0–95 £4000 RS485/CAN/WiFi/Ethernet/4G IP66 <25
range Humidity range	% m	424 × 555 × 197 19
Operating altitude	—	EN 62109-1/2, IEC 62109-1/2, EMC 61000, EN50549, VDE
Communication	—	
Protection degree Noise	dB	
Size (W×H×D) Weight	mm	
	kg	

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