

PiA3P Series

8-12kW| 5.12-30.72kWh| Three Phase ALL-IN-ONE

Features

Installation Friendly
- Modular design
- Plug-Play Installation

Smart
- Dual Output for Load Management
- Programmable supply priority for PV, Battery or Grid

Outdoor
- IP65 Rated

Powerful
- 6kW, 8kW, 10kW Output

AC Coupling
- with Existing Solar System
- Self-designed & Field-proven BMS

Multi Power Sorces
- 2 MPP trackers
- Generator Compatible
- Two independent AC Ports

Flexible Configuration
- 5.12kWh-30.72kWh

PiA3P Series Specs

MODEL	PiA3P8K	PiA3P10K	PiA3P12K
MAXIMUM PV INPUT POWER	12000W	15000W	18000W
RATED OUTPUT POWER	8000W	10000W	12000W
MAXIMUM CHARGING POWER	8000W	10000W	12000W
GRID-TIE OPERATION			
PV INPUT (DC)			
Nominal DC Voltage	720 VDC		
Maximum DC Voltage	900 VDC		
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC		
MPP Voltage Range	150 VDC ~ 850 VDC		
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	400 VDC ~ 850 VDC
Number of MPP Trackers / Maximum Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 27A, B: 18A
Number of Strings Per MPP Tracker	A: 2, B: 2	A: 2, B: 2	A: 2, B: 2
GRID/UTILITY OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Voltage Range	184 - 265 VAC* per phase		
Nominal Output Current	11.6 A per phase	14.5 A per phase	17.4A per phase
Power Factor range	0.9 lag ~ 0.9 lead		
EFFICIENCY			
Maximum Conversion Efficiency (DC/AC)	>96%		
European Efficiency@ Vnominal	>96%		
OFF-GRID OPERATION			
AC INPUT			
AC Start-up Voltage	120 - 140 VAC per phase		
Auto Restart Voltage	180 VAC per phase		
Acceptable Input Voltage Range	170 - 290 VAC per phase		
Maximum AC Input Current	40 A		
PV INPUT (DC)			
Maximum DC Voltage	900 VDC		
MPP Voltage Range	150 VDC ~ 850 VDC		
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	400 VDC ~ 850 VDC
Number of MPP Trackers / Maxium Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 27A, B: 18A
Number of Strings Per MPP Tracker	A: 2, B: 2	A: 2, B: 2	A: 2, B: 2
BATTERY MODE OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	>93%		
HYBRID OPERATION			
PV INPUT (DC)			
Nominal DC Voltage	720 VDC		
Maximum DC Voltage	900 VDC		
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC		
MPP Voltage Range	150 VDC ~ 850 VDC		
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	
Number of MPP Trackers / Maxium Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 18A, B: 18A
Number of Strings Per MPP Tracker	A: 2, B: 2	A: 2, B: 2	A: 2, B: 2
GRID/UTILITY OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Voltage Range	184 - 265 VAC* per phase		
Nominal Output Current	11.6 A per phase	14.5 A per phase	17.4A per phase
AC INPUT			
AC Start-up Voltage	120 - 140 VAC per phase		
Auto Restart Voltage	180 VAC per phase		
Acceptable Input Voltage Range	170 - 290 VAC per phase		
Maximum AC Input Current	40 A		
BATTERY MODE OUTPUT (AC)			
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)		
Output Waveform	Pure sine wave		
Maximum Discharging Current	200A	220A	250A
Efficiency (DC to AC)	>93%		
BATTERY & CHARGER			
Battery Voltage Range	40 ~ 60 VDC		
Maximum Charging Current	160 A	200A	240A
GENERAL			
PHYSICAL			
Maximum Charging Current	241 x 415 x682		
BATTERY & CHARGER			
Maximum Charging Current	RS-232/RS485, WIFI		
Maximum Charging Current	7-inch HMI		
BATTERY & CHARGER			
Maximum Charging Current	0 ~ 100% RH (No condensing)		
Maximum Charging Current	-20°C to 55°C		
BATTERY & CHARGER			
Maximum Charging Current	EU grid-connected regulations EN50549-1/-10		

Energy Storage Battery						
System Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh	25.6kWh	30.72kWh
Cell Type	LFP					
Normal Voltage	51.2Vdc					
Normal Capaticy	100Ah	200Ah	300Ah	400Ah	500Ah	600Ah
Recommended Charge/discharge current	50A	100A	150A	210A	210A	210A
No. of Battery Modules	1	2	3	4	5	6
Cycle Life	6000 times (25°C. 0.5C/0.5C. 90%DOD, 70% EOL)					
Ambient Temperature	Charging: (-20, 55) °C					
	Discharging: (-20, 55) °C					
Enclosure Type	IP65					
Warranty	10 years					
Certification	CE, UN38.3					