

MPS microgrid series

MPS Hybrid inverter

Product features:

Safe & reliable

- Built-in isolation transformer for high load adaptability;
- Perfect protection function for inverter and battery;
- Redundancy design for important functions;

Abundant configuration

- Integrated design, easy to integrate;
- Support simultaneous access of load, battery, power grid, diesel and PV;
- Built-in maintenance bypass switch, improve system availability;

Intelligent & efficient

- Support battery capacity and discharge time prediction;
- Smooth switching between on and off grid, uninterrupted supply of load;
- Operate with EMS to monitor system status in real time;

Friendly & flexible

- Various working modes can be set flexibly;
- PV controller modular design, easy to expand;



						
Technical specification	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
AC(on-grid)						
Max output power(kVA)	33	55	110	165	275	550
Rated power(kW)	30	50	100	150	250	500
Rated voltage(V)	400					
Rated current (A)	43	72	144	216	361	722
Voltage range(V)	320~460					
Rated frequency (Hz)	50/60					
Frequency range(Hz)	45~55/55~65					
THDi	<3%					
Power factor	1lagging~1leading					
AC connection	3W+N+PE					
Transformer ratio	100/400	200/400	270/400	270/400	270/400	315/400
AC(Off Grid)						
Max output power(kVA)	33	55	110	165	275	550
Rated power(kW)	30	50	100	150	250	500
Rated voltage(V)	400					
Rated current(A)	43	72	144	216	361	722
THDu	≤1% linear; or≤5% nonlinear					
Rated frequency(Hz)	50/60					
Overload capacity	110% long-term					
Photovoltaic input						
Max.PV input voltage(V)	1,000					
Max.PV power(kW)	60/120	60/120	120/180/240	120/180/240	300/360	600/660/720
MPPT voltage range(V)	250-850					
MPPT voltage range@full load (V)	450-850					
Battery						
Battery voltage range(V)	250~850	320~850	420~850	420~850	420~850	500~850
Max. charging power(kW)	60/120	60/120	120/180/240	120/180/240	300/360	600/660/720
General data						
Dimension W*D*H(mm)	800*800*1,900	800*800*1,900	1,200*800*2,050	1,200*800*2,050	(600*720*2,050)*1+ 1,200*800*2,050	(600*720*2,050)*2+ 1,600*1050*2,050
Weight(kg)	620/650	720/750	1,120/1,150/1,180	1,250/1,280/1,310	1,980/2,010	3,265/3,295/3,325
Operation temperature	-30°C ~ 55°C					
Relative humidity	0 ~95% non-condensing					
Ingress protection	IP20					
Noise emission(dB)	<70dB					
Altitude	5,000m(>3,000 Derating)					
Cooling	Air Cooling					
Display and communication						
Display	LCD touch-screen					
BMS communication	RS485, CAN					
EMS communication	RS485, TCP/IP					
Certificates	EN62109-1/-2, EN62477-1, EN61000-6-2, EN61000-6-4, South Africa NRS097-2-1:2017, Pakistan & India IEC61727, IEC62116, IEC 61683					



DC-DC specification		PMD050
DC		
Max . power(kW)		60
PV		
PV voltage range(V)		250~1,000
Full load voltage range(V)		450~850
Max . working current(A)		120
MPPT tracking accuracy max		99.6%
PV starting voltage(V)		250
Battery		
Battery voltage range(V)		250~850
Full load voltage range(V)		450~850
Max . working current(A)		120A
Protection function		
Overvoltage and undervoltage protection		yes
Overcurrent protection		yes
Short circuit protection		yes
Over temperature protection		yes
Insulation impedance detection		yes
Isolation mode		Transformerless
System parameter		
Operation temperature		-30℃~+60℃ (>55℃ Derating)
Max . altitude		5,000m (>3,000 Derating)
Relative humidity		0 ~95% non-condensing
Ingress protection		IP20
Noise		≤65dB@1m
Cooling		Temperature control intelligent air cooling
General data		
standby power (W)		<20W
BMS communication		RS485, CAN
Dimension W*D*H(mm)		550*444*133
Weight(kg)		26