

MPS microgrid series

MPS microgrid hybrid inverter



KEY STRENGTHS

- Integrated PV/MPPT module/transformer/STS and maintenance bypass.
- Support 100% unbalance.
- Support parallel connection of multiple machines.
- Easy expansion, support PV flexible configuration.
- Support DG load rate control to improve fuel economy.
- Support flexible configuration of control strategies.

APPLICATIONS

 Off-grid mine

 Off-grid island

 Nomadic farm

 Villages without electricity



MPS0030/MPS0050



MPS0100/MPS0150



MPS0250



MPS0500

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
AC(on-grid)						
Max. output power (kW)	33	55	110	165	275	550
Rated output power (kW)	30	50	100	150	250	500
Rated voltage(V)	400					
Voltage range (V)	320~460					
Rated current (A)	43	72	144	216	361	722
Rated frequency (Hz)	50/60					
Frequency range (Hz)	45~55/55~65					
THDi	<3%					
Power factor	1leading-1lagging(settable)					
Grid type	3W+N+PE					

AC(off-grid)						
Max. output power (kW)	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, 120% 1min					

PV input						
Max. PV input voltage (V)	1,000					
Max. PV power (kW)	36/72	60/120	120/180/240	120/180/240	300/360	600/660/720
MPPT module quantity	1/2	1/2	2/3/4	2/3/4	5/6	10/11/12
MPPT voltage range (V)	250~850					

Battery						
Battery voltage range (V)	250~850	320~850	420~850	420~850	420~850	500~850
Max. charging power (kW)	36/72	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*1,050*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 (°C)	-30 ~ 55					
Relative humidity	0 ~95% non-condensing					
Ingress protection	IP20					
Noise emission (dB)	<70					
Operating altitude (m)	<5,000(>3,000 Derating)					
Cooling	Air Cooling					

Display and communication

Display	LCD touch-screen					
BMS communication	RS485, CAN					
EMS communication	RS485, TCP/IP					
Certificates	EN 62109-1/-2, EN 62477-1, EN 61000-6-2/-6-4, IEC61727, IEC62116, IEC61683 NRS 097-2-1:2017, ASGC, AS/NZS 4417.1, CEI 0-21, CEI 0-16, G99 EN 50549-1, VDE 4105					

MPS PV and battery configuration principles:

- > Boost mode configuration principle - open voltage at low temperature at the limit of PV installation * number of PV panels in series ≤ the lowest voltage of the battery;
- > Buck mode configuration principle - the maximum power operating voltage at the extreme high temperature of PV installation ≥ the highest voltage of the battery;
- > The PV and battery configurations of MPS must comply with the above configuration principles.