

MPS microgrid series (480V)

MPS microgrid hybrid inverter



Key strengths

- Output voltage level, control strategy, etc, can be configured according to site requirements to ensure that the product can be adapted to the site application.
- Port message monitoring function, convenient for debugging and maintenance; EMS remote monitoring and data analysis; Compatible with many battery BMS protocols.
- Support multi-machine parallel connection function.

Applications

» Off-grid mine

» Off-grid island

» Nomadic farm

» Villages without electricity



MPS0030/MPS0050



MPS0100/MPS0150



MPS0250



MPS0500

AC(on-grid)

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
Max output power (kVA)	33	55	110	165	275	550
Rate output power (kW)	30	50	100	150	250	500
Rated voltage(V)	480					
Voltage range (V)	384~522					
Rated current (A)	37	61	121	181	301	601
Rated frequency (Hz)	50/60					
Frequency range (Hz)	45~55/55~65					
THDi	<3%					
Power factor	1lagging-1leading (Settable)					
AC connection	3W/N/PE					
Transformer ratio	100/480	200/480	270/480	270/480	270/480	315/480

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)	480					
Rated current (A)	37	61	121	181	301	601
THDu	≤1% linear; or ≤5% nonlinear					
Rated frequency (Hz)	50/60					
Overload capacity	110% long-term					

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 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)	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*1050*2,050
Net weight (kg)	576/607	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	<5000m(>3,000 Derating)					
Cooling	Air Cooling					

Display and communication

Display	LCD touch-screen					
BMS communication	RS485,TCP/IP, CAN					
EMS communication	RS485,TCP/IP, CAN					

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.