



MPS Hybrid Inverter

> KEY STRENGTHS

 Highly integrated, easy to deploy, shorten the installation and debugging time.

 Internal integration of optical/storage /pcs equipment, more unified bus control, increased system stability.

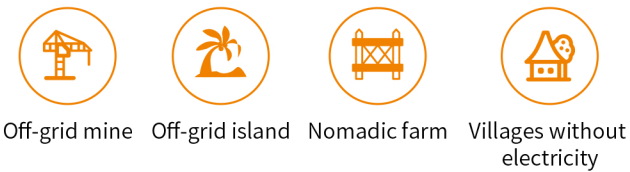
 Easy expansion, support PV flexible configuration.

 EMS functions are integrated into hybrid inverter , improve the economic benefits of the system.

 Support unattended, improve the operation and maintenance efficiency of the operator.



> APPLICATION AREA



MPS series hybrid inverters adopt an integrated design, integrating PV controllers, energy storage converters, and on/off-grid automatic switching units, which greatly improves customer deployment efficiency and reduces installation costs. PV capacity can be flexibly configured, which greatly improves system availability and is suitable for the remote areas and islands where power is relatively weak.

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)	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	1lagging-1leading (Settable)					
AC connection	3W+N+PE					
Transformer ratio	100/400	200/400	270/400	270/400	270/400	315/400

AC(off-grid)

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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					

PV input

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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 (°C)	-30 ~ 55					
Relative humidity	0 ~95% non-condensing					
Ingress protection	IP20					
Noise emission (dB)	<70					
Altitude	5,000m(>3,000 Derating)					
Cooling	Air Cooling					

Display and communication

Model	MPS0030	MPS0050	MPS0100	MPS0150	MPS0250	MPS0500
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					

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.