



# PLS8K/10K/12K-M1

## Single Phase Low Voltage Hybrid Inverter



### Higher Yield

98.6% max efficiency;  
2 MPPTs



### Higher Quality

IP 66 ingress protection; Efficient heat dissipation;  
Uvioresistant; Corrosion resistant



### Safety

Ground fault monitoring;  
Thunder-proof and low radiance



### Compatibility

AC output voltage 180 V to 300 V adjustable, compatible  
with the grids of most countries;  
Higher DC max input voltage and current



### Easy To Use

Easy to install;



### Communications

Wifi, 4G, GPRS, Bluetooth, RS485;  
Remote monitoring



Model	PLS8K-M1	PLS10K-M1	PLS12K-M1
<b>Battery Input Data</b>			
Battery Type	Li-ion or Lead-acid		
Battery Voltage Range(V)	48		
Max. Charging/Discharging Current(A)	167/167	208/208	208/208
Rated Charging Current(A)	167/167	208/208	208/208
External Temperature Sensor for Lead-acid	Yes		
Charging Strategy for Li-ion battery	Self-adaption to BMS		
Communications	RS485, CAN		
<b>PV String DC Input Data</b>			
Recommended max. PV power(KW)	16	20	24
Max. input voltage(V)	600		
Start-up voltage/ Min. input DC operation voltage(V)	30/40		
MPPT voltage range(V)	80~580		
Max. input current(A)	40/40		
Max. short circuit current(A)	60/60		
MPPT number	2		
Strings number per MPPT	2/2		
<b>AC Output Data(On-Grid Side)</b>			
Rated output power(KW)	8	10	12
Rated /Max. apparent output power(KVA)	8/8	10/10	12/12
Rated grid output current(A)	34.8	43.5	52.2
Max. output current(A)	34.8	43.5	52.2
Operation phase	1P		
Rated grid voltage/range(V)(L/N/PE)	220/230/240/180 - 300		
Rated grid frequency(Hz)	50/60		
Power Factor	>0.99 (-0.8 to +0.8 adjustable)		
THDi	<3%		
<b>AC Output Data(Back-Up/UPS Side)</b>			
Rated output power(KW)	8	10	12
Peak apparent output power	110% - 150% of rated power, 10 S		
Back-Up/UPS switch time	<10 ms		
Rated grid voltage/range(V)(L/N/PE)	220/230/240 / 180 - 300		
Rated frequency(Hz)	50/60		
Rated output current(A)	34.8	43.5	52.2
THDv(@linear load)	<2%		
<b>Efficiency</b>			
Max. efficiency	98.60%		
EU efficiency	98.10%		
<b>Protection</b>			
Ground fault monitoring	Yes		
Output over voltage protection	Yes		
Anti-islanding protection	Yes		
Integrated AFCI	Optional		
DC reverse-polarity protection	Yes		
AC short circuit protection	Yes		
Leakge current protection	Yes		
Surge protection	Yes		
DC switch(solar)	Yes		
Battery input reverse polarity protection	Yes		
Over voltage category	AC ClassIII/PV ClassII		
<b>General Data</b>			
Dimensions(mm)(W*H*D)	540*700*200		
Shell material	Aluminium alloy		
Weight(Kg)	35		
Operating ambient temperature range	-25~60 ℃		
Topology	Transformerless		
Ingress protecton	IP66		
Cooling concept	Natural Convection&Smart Fan		
Max. operation altitude(m)	3000		
Grid connection standard	AS/NZS4777:2020, EN50549-10:2022, G98:2021, G99:2021, NC RFG, ABNT NBR 16150, VDE-AR-N 4105, CEIO-21, CEIO-16, RD1699, NA/EEA, C10:2019, PPDS:2021, Tor+R25, IEC61683, IEC61727&62161		
Safety/EMC standard	IEC-62109-1/-2, IEC-61000-6-1/-2/-3, NB/T32004		
DC connection	MC4/D4		
Communications	Wifi, 4G, GPRS, Bluetooth, RS485,CA		