



## Features

- Pure sine wave output
- With UPS automatic switching function, grid power charging function
- Protection: over load, high voltage, low voltage, short circuit etc.
- DSP intelligent chip control, excellent performance
- Strong inverting capacity, one-time soft start, triple output peak power with all inductive loads
- Smart LCD display and setting (working modes, charge current, charge voltage, charging on/off switch, AC range input, battery voltage, battery low voltage shutdown etc.)
- Full personalized LCD display, inverters can display various data information
- Strong inverting capacity, one-time soft start, triple output peak power with all inductive loads
- Mains priority mode, battery priority mode, energy saving priority, generator mode, mains priority unattended mode, battery priority unattended mode, can be set freely to meet different occasions.
- 110V/120VAC, 220V/240VAC double input & output available
- Wifi/RS485/AGS remote monitoring communication (optional)

## Data Sheet

Model	MLS-1K	MLS1K5	MLS-2K	MLS-3K	MLS-4K	MLS-5K	MLS-6K	MLS-8K	MLS-10K	MLS-12K
Continuous Output Power	1KW	1.5KW	2KW	3KW	4KW	5KW	6KW	8KW	10KW	12KW
Surge Rating(20ms)	3KW	4.5KW	6KW	9KW	12KW	15KW	18KW	24KW	30KW	36KW
Output Waveform	Pure sine wave / Same as input (bypass mode)									
Output Voltage RMS	HOT1 + N / HOT2 + N: 110V/120VAC ± 10%, HOT1 + N / HOT2 + N: 220V/240VAC ± 10%									
Output Frequency	50Hz or 60Hz (±0.3Hz)									
Inverter Efficiency (peak)	> 85%									
Line Mode Efficiency	95%									
Overload (HOT1 + HOT2)	120% < load < 130% ± 10: fault (turn off output after 60s) 130% < load < 150% ± 10: fault (turn off output after 10s) 150% < load ± 10: fault (turn off output after 10s)									
Overload (HOT1 + N/HOT2 + N)	60% < load < 65% ± 10: fault (turn off output after 60s) 65% < load < 75% ± 10: fault (turn off output after 10s) 75% < load ± 10: fault (turn off output after 10s)									
<b>Battery</b>										
Battery Voltage	12V/24V/48V			24V/48V			48V/96V			
Minimum Start Voltage	(9.5V-12.5V adjustable) + 0.5V for 12VDC mode (*2 for 24VDC, *4 for 48VDC, *8 for 96VDC)									
Low Battery Voltage Cut Off	(9.5V-12.5V adjustable), 10V(default) for 12VDC mode (*2 for 24VDC, *4 for 48VDC, *8 for 96VDC)									
Low Battery Voltage Alarm	(9.5V-12.5V adjustable), 10.5V(default) for 12VDC mode (*2 for 24VDC, *4 for 48VDC, *8 for 96VDC)									
High Battery Voltage Alarm	16V for 12Vdc mode (*2 for 24VDC, *4 for 48VDC, *8 for 96VDC)									
Low Battery Voltage Recover	15.5V for 12Vdc mode (*2 for 24VDC, *4 for 48VDC, *8 for 96VDC)									
Battery Type	AGM, Lead Acid, Lithium, Ternary									
<b>AC Input Mode</b>										
Input Waveform	Pure sine wave									
Nominal Input Voltage (Double Input)	HOT1 + N: 110V/120VAC ± 20%, HOT1 + N + HOT2: 220V/240VAC ± 20%									
Low Input Voltage	110V/220VAC: 70-90VAC (adjustable), 80VAC (default), 220/240VAC: 140-180VAC (adjustable), 160VAC (default)									
Max. Input Voltage	110V/220VAC: 130-145VAC (adjustable), 137VAC (default), 220/240VAC: 260-290VAC (adjustable), 275VAC (default)									
Input Frequency	50Hz / 60Hz (auto/ sensing)									
Efficiency (AC Mode)	>95% (load, full battery)									
Transfer Time AC to DC	8ms (max.)									
<b>Solar Charger (Optional)</b>										
Max. PV Charge Current	40A, 50A, 60A, 80A, 100A						100A, 120A, 150A			
Max. PV Array Power	24V solar system		40A: 960W, 50A: 1200W, 60A: 1440W, 80A: 1920W, 100A: 2400W							
	48V solar system		50A: 2400W, 60A: 2880W, 80A: 3840W, 100A: 4800W, 120A: 5760W, 150A: 7200W							
	96V solar system		100A: 9600W, 120A: 11520W, 150A: 14400W							
MPPT Range @ Operating Voltage	30-120VDC @24V, 60-150VDC@48V, 120-170VDC@96V							60-150VDC@48V 120-270VDC@96V		
Max. PV Array Open Circuit Voltage	130VDC@24V, 160@48V, 180VDC@96V (max.: 60A)							160VDC@48V / 280@96V		
Max. Efficiency	>98%									
Standby Power Consumption	<2W									
<b>AC Charger Current (Max.)</b>										
12VDC	30A	30A	30A	/	/	/	/	/	/	/
24VDC	30A	30A	40A	40A	50A	/	/	/	/	/
48VDC	10A	10A	20A	30A	40A	50A	50A	50A	50A	50A
96VDC	/	/	/	/	/	20A	20A	30A	30A	30A
Minimum charge current: 5A charge by every 5A-10A										
<b>Mechanical Specifications</b>										
Mounting	Wall mount									
Inverter Dimensions(W*H*D) mm	500*320*210			500*390*210			650*450*260			
Packing Dimensions(W*H*D) mm	580*380*250			600*480*285			760*530*330			
N.W. (KGS)	14	16	19	21	29	31	33	53	55	60
G.W. (KGS)	16	19	21	23	31	33	35	58	60	65