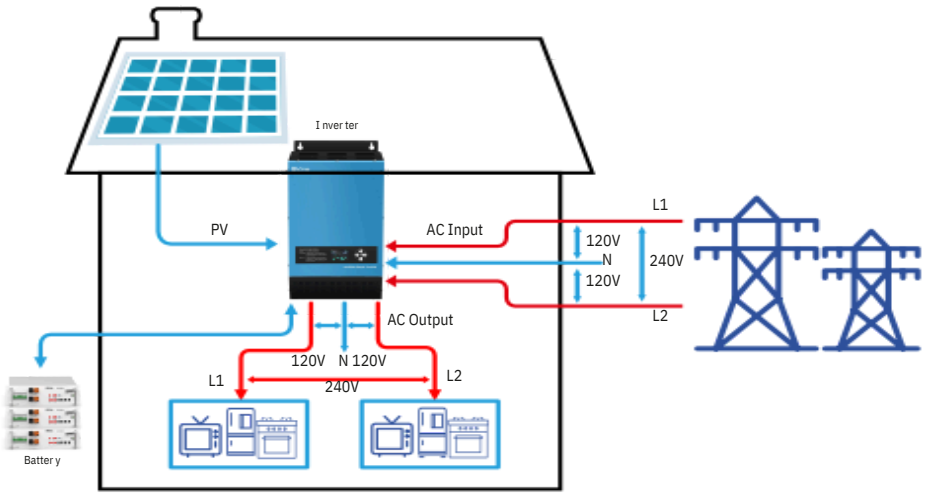
Data Sheet

Single Phase Solar Inverter Charger
Uhome UHX-6K-1P Blue Single 6kW 48V





Version 01 | 19-12-2025

8. Technical specification

Model: LS-Max/LS-Max-T		10212/24/48	15212/24/48	20212/24/48	30224/48	40224/48	50248	60248
Rated Power		1000W	1500W	2000W	3000W	4000W	5000W	6000W
Battery Voltage		12/24/48VDC			24/48VDC		48VDC	
Size(L*W*Hmm)		500*300*140				530*335*150		
Package Size(L*W*Hmm)		570*385*210				600*420*220		
N.W.(kg)		13	14	15	18	22	24	26
G.W.(kg)(Carton Packing)		14.5	15.5	16.5	19.5	23.5	25.5	27.5
Installation Method		Wall-Mounted						
Input	DC Input Voltage Range	10.5-15VDC(Single battery voltage)						
	AC Input Voltage Range	80VAC~133VAC(105VAC)/85VAC~138VAC(110VAC)/90VAC~143VAC(115VAC)/ 95VAC~148VAC(120VAC)/170VAC~275VAC(220VAC)/180VAC~285VAC(230VAC)/ 190VAC~295VAC(240VAC)						
	AC Input Frequency Range	45Hz~55Hz(50Hz) / 55Hz~65Hz(60Hz)						
	Max AC charging current	0~30A(Depending on the model)						
	AC charging method	Three-stage (constant current, constant voltage, floating charge)						
Output	Efficiency(Battery Mode)	≥85%						
	Output Voltage(Battery Mode)	AC105V~120V model: 105VAC±2%/110VAC±2%/115VAC±2%/120VAC±2%(can be set) AC220V~240V model: 220VAC±2%/230VAC±2%/240VAC±2%(can be set)						
	Output Frequency(Battery Mode)	50/60Hz±1%(can be set)						
	Output Wave(Battery Mode)	Pure Sine Wave						
	Efficiency(AC Mode)	>99%						
	Output Voltage(AC Mode)	AC105V~120V model: 105VAC±10%/110VAC±10%/115VAC±10%/120VAC±10%(can be set) AC220V~240V model: 220VAC±10%/230VAC±10%/240VAC±10%(can be set)						
	Output Frequency(AC Mode)	Follow input						
	Output waveform distortion Battery Mode)	≤3%(Linear load)						
	No load loss(Battery Mode)	≤0.8% rated power						
	No load loss(AC Mode)	≤2% rated power(charger does not work in AC mode)						
	No load loss(Energy saving Mode)	≤10W						
Battery Type	Custom battery	Charging and discharging parameters of different types of batteries can be set through the operation panel by oneself						
Inside Solar controller (Optional)	Charging Mode	MPPT						
	Charging current	30A~60A				60A~100A		
	PV Array Maximum Power	12V system: 420W(30A)/560W(40A)/700W(50A)/ 840W(60A); 24V system: 840W(30A)/1120W(40A)/1400W(50A)/ 1680W(60A); 48V system: 1680W(30A)/2240W(40A)/2800W(50A)/ 3360W(60A)				24V system: 1680W(60A)/ 2240W(80A)/ 2800W(100A); 48V system: 3360W(60A)/ 4480W(80A)/ 5600W(100A)		
	Max PV Input Voltage(Voc) (At the lowest temperature)	12V/24Vsystem: 120VDC; 48Vsystem: 180VDC						
	MPPT tracking range	12Vsystem: 15V-80V; 24Vsystem: 30V-100V; 48Vsystem: 60V-140V						
	Standby loss	≤3W						
	Maximum conversion efficiency	>95%						

Protection	Battery lowvoltage alarm	Factory default: Pb:11V/Single battery voltage; LI*:10% of the battery capacity
	Battery lowvoltage protection	Factory default: Pb:10.5V/Single battery voltage ; LI*:5% of the battery capacity
	Battery overvoltage alarm	Factory default: Pb:15.5V/Single battery voltage; LI*:following BMS instruction
	Battery overvoltage protection	Factory default: Pb:17V/Single battery voltage; LI*:following BMS instruction
	Battery overvoltage recovery voltage	Factory default: Pb:14.5V/Single battery voltage; LI*:following BMS instruction
	Overload power protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)
	Inverter output short circuit protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)
	Temperature protection	>90°C(Shut down output)
Alarm	A	Normal working condition, buzzer has no alarm sound
	B	Buzzer sounds 4 times per second when battery failure, voltage abnormality, overload protection
	C	When the machine is turned on for the first time, the buzzer will prompt 5 when the machine is normal
Working Mode		Battery First/AC First/Saving Energy Mode
Transfer Time		≤4ms
Display		LCD
Thermal method		Cooling fan in intelligent control
Communication		RS485 Communication/APP data collector interface(WIFI/GPRS data collector(optional))
Environment	Operating temperature	-10°C~40°C
	Storage temperature	-15°C~60°C
	Noise	≤55dB
	Elevation	2000m(More than derating)
	Humidity	0%~95% (No condensation)

Above parameter revision change without notification.