

Specification

Product picture: (XYM500W - 14.6V 20A)



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■Product description

The charger adopts MCU three-stage intelligent charging technology, which can accurately track and detect the charging process of lithium battery, make it always in the best charging state, and greatly extend the service life of lithium battery.

The charger has wide input voltage range, multiple protection functions and high reliability. The control circuit adopts advanced high-frequency transformer half bridge switching power supply control technology, and reasonable structure and heat dissipation design, which makes the whole machine high efficiency, small volume, light weight, and greatly improves the portability of the charger

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2、Main product specifications

Maximum output	Input voltage	Output Voltage	The output current
600W	180-245Vac	14. 6Vdc	20A

3、Work Conditions:

	project	The technical requirements	unit	Remark
3.1	Operating temperature	-10~+40	℃	
3.2	Storage temperature	-40~+75	℃	
3.3	Relative humidity	5%~95%	/	No condensation
3.4	Atmospheric pressure	70~106	Pa	
3.5	The altitude	≤2000	m	
3.6	The cooling way	External built-in ball fan for heat dissipation	/	

4、Electrical characteristics

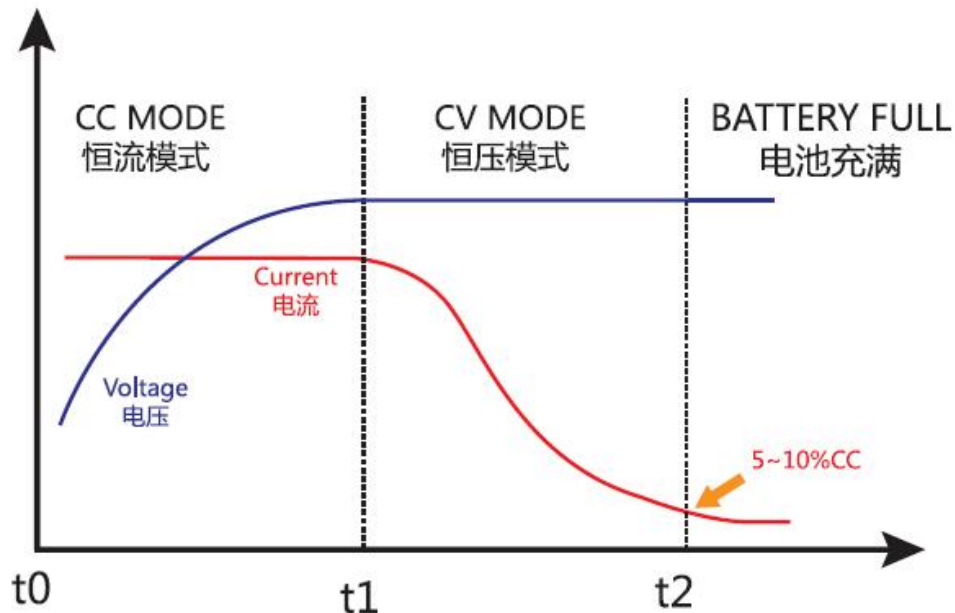
The input features				
	project	The technical requirements	unit	Remark
4.1	Rated input voltage	180-245	Vac	Input voltage with manual switch switching 110V-220V
4.2	Input voltage range	180-245	Vac	
4.3	Ac input voltage	47~63	Hz	

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	frequency		
4.4	Input impulse current	≤ 100	A
4.5	Maximum input current	≤ 9.0	A
4.6	PFC	NC	/

Output characteristic			
project	The technical requirements	unit	
Charging voltage (CV)	$14.6V \pm 0.2V$	Vdc	
Output constant current (CC)	20.0 ± 0.5	A	
stabilized voltage precision	$\pm 0.2V$	/	
efficiency	$\geq 91\%$	/	Vin=220Vac, Full load
Protection Features			
Quick Details	The technical requirements	Remark	
Output overvoltage protection	$14.6V \pm 3\%$	Lock no output	
Output current limiting protection	$20.0 \pm 0.5A$	@CC MODE	
Output short circuit protection	Automatic output recovery after short circuit removal		
Overheating protection	When the internal temperature of the charger reaches the over-temperature protection point, the charger will automatically stop charging		
Battery breaker protection	When the battery is broken, the battery can not be full to 100%, the charger timing shutdown		
Certificates	CE, RoHS		

Charging curve



LED indicator status and digital tube display status

LED Indicator Status: Charger Status

LED2 red LED1 off: plug in the mains power without the battery

LED2 red light LED1 red light: plug in the mains power connect the battery

LED2 red light LED1 red light: normal charging fan running

LED2 Green LED1 Off : Charging completed Fan stopped

Note: the charger software automatically adjusts the charging current according to the battery voltage

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Safety and EMC characteristics

	project		Standard (or test conditions)	Remark
5.1	The electric strength	input-output	1500Vac/10mA/1min	No flashover, no breakdown
		Input - earth	1500Vac/10mA/1min	
		Input - earth	500Vdc/10mA/1min	
5.2	Insulation resistance	input-output	$\geq 10M\Omega @ 500Vdc$	
		Input - earth	$\geq 10M\Omega @ 500Vdc$	
		Input - earth	$\geq 10M\Omega @ 500Vdc$	
5.3	Leakage current		$< 3.5mA$	$V_{in}=264Vac, 60Hz$

6、Environmental test requirements

	project	The technical requirements	Remark
6.1	High temperature work	+40℃	Normal performance after 24 hours of operation
6.2	Work in low temperature	-10℃	Normal performance after 24 hours of operation
6.3	High temperature storage	+75℃	Normal temperature restored two hours, normal work
6.4	Low temperature storage	-20℃	Normal temperature restored two hours, normal work
6.5	vibration	5-9hz, with an amplitude of 3.5mm; 9-200hz, acceleration 10m/s ² ; 3 axial, frequency sweeping vibration 5 times in each direction (about 3 50 minutes);	(1) components (2) appearance (3) indicators
6.6	impact	Pulse contact time 6mS; Acceleration 250m/s ² ; Six faces, 500 collisions in each direction;	(1) components (2) appearance (3) indicators

7、Definition of mechanical properties and connectors

Shell material: aluminum alloy

Shell size: length width height =L217 *W130 *H73 (MM)

Input power cord: 1.2m

Output line: 1.1m

Weight: 1.9 kg

8. Packaging, transportation and storage

8.1 the packing

The packing box shall contain the product name, model number, manufacturer's logo, inspection certificate issued by the quality department of the manufacturer, date of manufacture, etc.; The packing case contains a list of accessories.

8.2 transportation

Suitable for vehicle, ship and plane transportation, with awning, sun protection and civilized loading and unloading.

8.3 the storage

Product should be stored in the packing box when not used, the warehouse environment temperature of $40\text{ }^{\circ}\text{C} \sim +70\text{ }^{\circ}\text{C}$, relative humidity is $5\% \sim 95\%$, warehouse there is no harmful gas, flammable, explosive and corrosive chemicals, and there is no strong mechanical vibration, impact and strong magnetic field effect, packing should be at least 20 cm high from the ground, walls, heat sources, air inlet window or distance at least 50 cm, under the condition of these provisions, the storage period is two years commonly, more than 2 years should be tested again.

9. Reliability requirements

MTBF $\geq 30\text{khour}$ (25 $^{\circ}\text{C}$, full load)

Service life ≥ 3 years

