MW-SC8E

Electronic smart charger – 12V/1A/4A/8A, 24V/1A/4A





■Features:

- Suitable for 12V and 24V lead-acid wet, gel and AGM batteries
 - Battery capacity: 1.2Ah 240Ah(12V), 1.2Ah-120Ah (24V)
 - Protections: Short circuit / Over voltage
 - Selectable charging current: 1A/4A/8A (12V), 1A/4A (24V)
- LCD display and user-friendly interface, Microprocessor-controlled
 - Battery condition detection, recondition mode

■ Applications:

• Cars, quads, boats, lawn mowers, motorcycles, mopeds, snow and water scoooters

ELECTRICAL SPECIFICATION

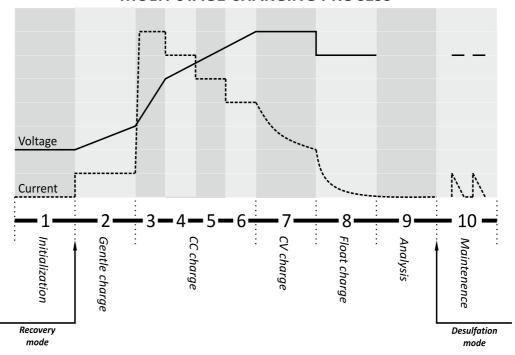
MODEL	MW-SC8E		
INPUT			
Input voltage	220-240V (50Hz)		
Input current (max.)	0.75A/230VAC		
ОИТРИТ			
Output voltage (max.)	14.7V		29.4V
Output current	1A / 4A / 8A (selectable)		1A / 4A (selectable)
Rated power (max.)	96W		
Efficiency (typ.)	80%		
PROTECTIONS			
Over voltage	>16VDC (12V mode), >32V (24V mode), shut down output voltage		
Short circuit	Shut down output voltage, indicated on the display		
WORKING ENVIRONMENT			
Working temperature	-5°C ÷ +40°C		
Working humidity	20-90% (RH non-condensing)		
Storaage temperature and humidity	-10°C ÷ 60°C, 10 ÷ 95% (RH non-condensing)		
SAFETY AND EMC REGULATIONS			
Safety standards	EN 60335-2-29:2004 + A2:2010; EN 60335-1:2012 + A11:2014		
EMC standards	EN 55014-1 , EN 61000-3-3, EN 55014-2, EN 61000-3-3, EN-61000-3-2		
OTHERS			
Dimensions	Length	Width	Height
Dimensions	218mm	89mm	49mm
Weight (net/gross)	0.644kg / 0.808kg		
EAN code	5 902135 135518		

MW-SC8E-spec-EN-R1 12.02.2021 (1/3)



CHARGING STAGES

MULTI-STAGE CHARGING PROCESS



No.	Stage	Description	
1	Initialization	Checks the battery's condition to determine the charge process. If the battery is deeply discharged, it will enter into the Recovery Mode to refresh the battery.	
2	Gentle charge	Starts the charging process with a small current, which can warm up the batteries and avoid the battery suddenly bulk charged.	
3 - 6	Constant current charge	Returns 85% of the battery capacity by charging at max rate and other rate.	
7	Constant voltage charge	Brings the charge level to 95% by gradually decreasing the current, which limits battery gassing and prolong battery life.	
8	Float charge	Finalizes the charging process and brings the battery to maximum capacity.	
9	Analysis	It will cut off the output and analyze whether the battery can hold the capacity. It may enter into the Desulfation Mode to deeply recover the battery.	
10	Maintenence	Monitors battery condition. If battery voltage falls below its threshold, the charger restarts the charge, which ensures the battery at full charge and without the risk of overcharge.	

	-	Recovery mode	Achieves the recovery process of deeply discharged or sulfated batteries by pulsing small current - refers to battery reconditioning function. This mode is started both automatically (when the battery is deeply discharged) and manually by pressing Recondition button.
, , , , , , , , , , , , , , , , , , , ,		Desulfation mode	Recover battery capacity from a sulfated battery by applying a specialized high voltage to soften down sulfate from the battery plates - refers to battery reconditioning function. This stage is initialized after <i>Analysis</i> if the battery does not hold the charge.

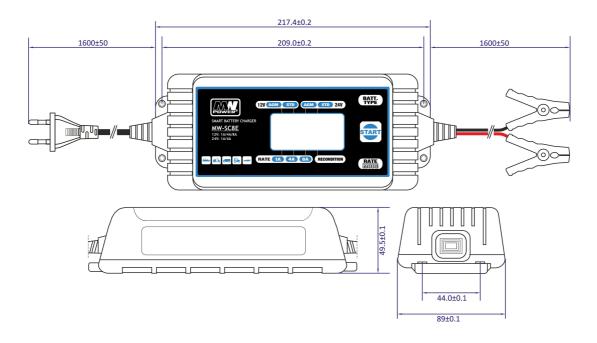
For further details, please refer to the user manual.

MW-SC8E-spec-EN-R1 12.02.2021 (2/3)

Electronic smart charger – 12V/1A/4A/8A, 24V/1A/4A



MECHANICAL SPECIFICATION



MW-SC8E-spec-EN-R1 12.02.2021 (3/3)