

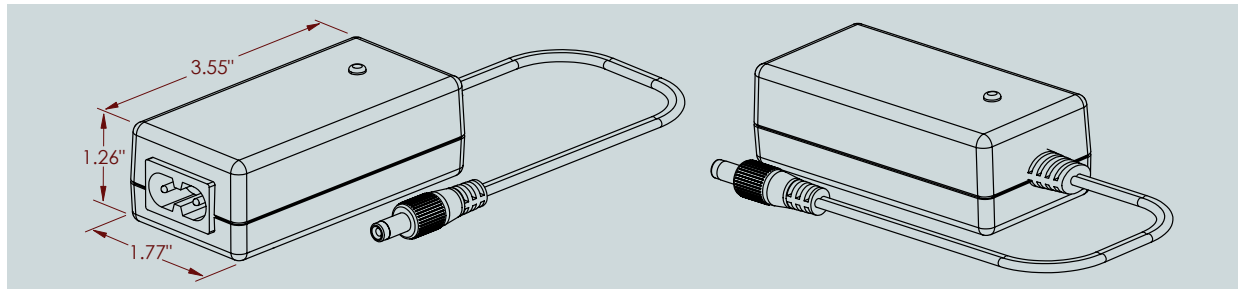
Switch mode lead acid chargers are designed to effectively charge sealed lead acid batteries while protecting the batteries from over-charging. All charger ratings are based on a nominal input of 90-264VAC/47-63Hz. The output current ranges from 500mA to 1.3A.



LEAD ACID CHARGER, 1.3A

Features:

- Medically certified (UL 60601)
- 3-step charge control
- Current detection as charge termination
- Switch mode charger with universal input voltage
- Available in 6V, 12V and 24V versions
- Protected against reverse polarity and short circuit
- LED status indicator
- Custom specifications on request



Category	Specification		
Model number	452240-SA	452240-SB	452240-SC
Input rating	Nominal 90-264VAC/47-63Hz		
Nominal voltage rating	6VDC	12VDC	24VDC
Maximum output power	9.5W	14.7W	14.7W
Switch frequency	≈ 40kHz		
Leakage current from battery	≈ 0		
Operating/storage temperature	-25°C - +40°C / -25°C - +85°C		
Ripple	< 100 mV p-p		
Efficiency (at 100% load, 230V)	67%	78%	82%
Insulation class	Class II		
Insulation voltage	4000VAC (primary) / 5640VDC (secondary)		
Electrical safety approvals	UL 60601-1, EN 60950, EN 60601-1, EN 60335-2-29		
EMC standards	EN 60601-1-2 (Medical), EN 61000-6-3 (Emission), EN 61000-6-1 (Immunity)		
Reliability (MIL-GDBK-217F)	MTBF > 250,000 hours at 30°C and full load		
Input connection	2 pin IEC320-C7 (input cordset not included)		
Output connection	2.5mm x 5.5mm x 9.5mm barrel plug, center positive*		
Dimensions/weight	3.55" x 1.7" x 1.26" (90 x 45 x 32mm) / .25 lbs (115g)		
Recommended battery capacity	4 - 12Ah	3 - 12Ah	1.5 - 12Ah

*other output connection options available upon request



Functionality:

Once the charger is attached to a sealed lead acid battery and plugged in, the charging process will begin. The charger will subject the lead acid battery to three steps of charging.

In the first step, the charger will enter into 'fast charge' mode. During this step, the charger is in constant current mode with the current rate remaining at its maximum value.

In step two, the battery will be nominally 80-95% charged, and the charger will switch into constant voltage mode (current is no longer being provided at its maximum rate). The charger will continue to provide a constant voltage until the charge current decreases to the charge termination level.

The third and final step will place the charger in standby/ready mode as the battery will be fully charged. Because the charge voltage is at a standby level, the charger can continue to be connected to the battery. Should the battery be used, the charger can return to rapid charging (step 1).

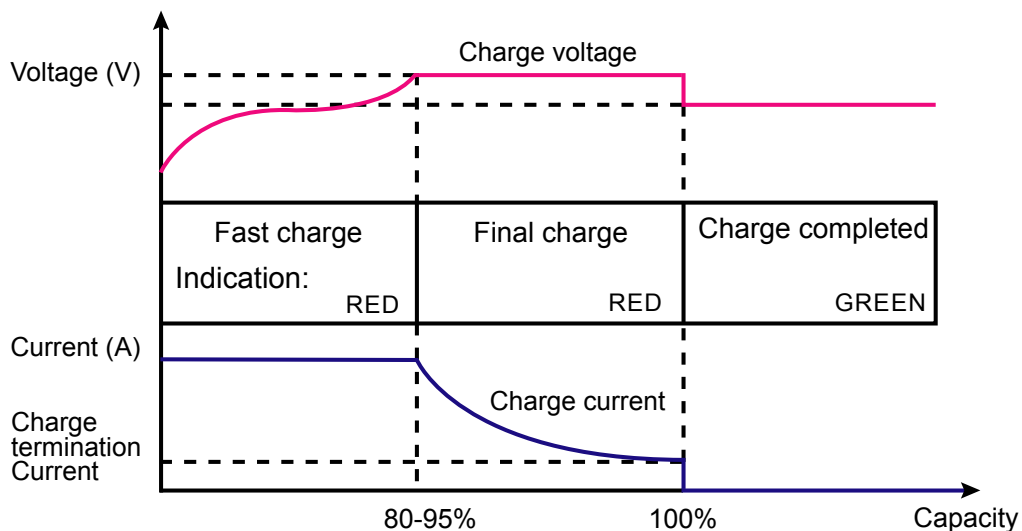
Charge control values:

Model number	452240-SA	452240-SB	452240-SC
Charger voltage rating	6V	12V	24V
Step 1: Charge current	1.3A +5/-7%	1.0A +5/-7%	0.5A +5/-7%
Step 2: Charge voltage	7.35VDC	14.7VDC	29.4VDC
Step 3: Charge termination	250mA +/-20%	250mA +/-20%	250mA +/-20%
Standby voltage	6.85VDC	13.7VDC	27.4VDC

LED status indicator:

The lead acid charger has an LED status indicator to inform the user of its status. During step 1 and step 2, the LED will appear red in color. During step 3, the LED will appear green in color.

Charge curve



*When specifying product, please consult with Cell-Con to verify that the specifications identified on this data sheet are current.

