



# A-C SERIES SWITCH-MODE CHARGERS FOR SLA BATTERIES



## Features

- I.C. based voltage and current regulation designed for sealed (valve-regulated) lead-acid batteries
- Useable on domestic and overseas input voltages from 110VAC - 60Hz to 240VAC - 50Hz, except for the PSC-1210000A-C, see charger selection guide
- Automatic, current sensing dual-rate charging for efficient, care-free and safe operation
- L.E.D.s indicate 'power on' and "FAST" and "FLOAT" charging modes
- Lightweight wall mounted plug-in or desk top design with screw type output terminals, depending on output current
- Connectors to the battery are alligator clips with insulated sleeves
- Protected against accidental reverse polarity connection
- U.L. and European C.E. approval

## Operating Characteristics

"A-C" series chargers are new "switching" type devices which operate without the use of transformers. I.C.'s control and regulate current and voltage and automatically switch from the higher fast charge voltage to the lower float voltage when batteries are very close to being fully charged. At the float voltage it is safe to leave the battery connected to the charger indefinitely, making charging pretty much fool-proof.

In the fast charge mode voltage goes up to 2.45V +/- 0.05V before switching, in the float charge mode voltage is held between 2.25- 2.30V/cell.

This charger is ideal for cyclic applications where recharge time is critical and timely charge termination cannot be counted on. This charger ensures optimum battery performance & service life.

## Specifications

| Model           | Nominal Voltage | Output Voltage<br>Float/Fast Charge | Output Current<br>mA | Type<br>Automatic | Dimensions: in. (mm) |            |           | Weight |      | Charger Design |
|-----------------|-----------------|-------------------------------------|----------------------|-------------------|----------------------|------------|-----------|--------|------|----------------|
|                 |                 |                                     |                      |                   | Length               | Width      | Height    | lbs.   | kgs. |                |
| PSC-6300A-C     | 6               | 6.75 / 7.35                         | 300                  | dual rate         | 2.05 (52)            | 1.57 (40)  | 2.64 (67) | 0.21   | 0.10 | Plug-in        |
| PSC-6500A-C     | 6               | 6.75 / 7.35                         | 500                  | dual rate         | 2.05 (52)            | 1.57 (40)  | 2.64 (67) | 0.21   | 0.10 | Plug-in        |
| PSC-61000A-C    | 6               | 6.75 / 7.35                         | 1000                 | dual rate         | 2.24 (57)            | 1.73 (44)  | 3.23 (82) | 0.30   | 0.14 | Plug-in        |
| PSC-64000A-C    | 6               | 6.75 / 7.35                         | 4000                 | dual rate         | 5.43 (138)           | 2.83 (72)  | 1.65 (42) | 0.90   | 0.41 | Desk Top       |
| PSC-12300A-C    | 12              | 13.50 / 14.70                       | 300                  | dual rate         | 2.05 (52)            | 1.57 (40)  | 2.64 (67) | 0.21   | 0.10 | Plug-in        |
| PSC-12500A-C    | 12              | 13.50 / 14.70                       | 500                  | dual rate         | 2.24 (57)            | 1.73 (44)  | 3.23 (82) | 0.30   | 0.14 | Plug-in        |
| PSC-12800A-C    | 12              | 13.50 / 14.70                       | 800                  | dual rate         | 2.24 (57)            | 1.73 (44)  | 3.23 (82) | 0.30   | 0.14 | Plug-in        |
| PSC-122000A-C   | 12              | 13.50 / 14.70                       | 1800                 | dual rate         | 5.43 (138)           | 2.83 (72)  | 1.65 (42) | 0.90   | 0.41 | Desk Top       |
| PSC-124000A-C   | 12              | 13.50 / 14.70                       | 4000                 | dual rate         | 5.43 (138)           | 2.83 (72)  | 1.65 (42) | 0.90   | 0.41 | Desk Top       |
| PSC-1210000A-C* | 12              | 13.50 / 14.70                       | 10000                | dual rate         | 8.80 (224)           | 5.17 (131) | 3.33 (85) | 4.30   | 1.95 | Desk Top       |
| PSC-241000A-C   | 24              | 27.00 / 29.40                       | 1000                 | dual rate         | 5.43 (138)           | 2.83 (72)  | 1.65 (42) | 0.90   | 0.41 | Desk Top       |

Note: All plug-in design have 39" (1m) leads. All desktop design have 59" (1.5m) input leads and 39" (1m) output leads.

## Charger Selection Guide

| Charger Model   | Max Output (mA) | Use with Battery |           | U.L./C.E. Certified |
|-----------------|-----------------|------------------|-----------|---------------------|
|                 |                 | Voltage          | Capacity  |                     |
| PSC-6300A-C     | 300             | 6                | 1-3 AH    | YES                 |
| PSC-6500A-C     | 500             | 6                | 2-5 AH    | YES                 |
| PSC-61000A-C    | 1000            | 6                | 5-10 AH   | YES                 |
| PSC-64000A-C    | 4000            | 6                | 10-40 AH  | YES                 |
| PSC-12300A-C    | 300             | 12               | 1-3 AH    | YES                 |
| PSC-12500A-C    | 500             | 12               | 2-5 AH    | YES                 |
| PSC-12800A-C    | 800             | 12               | 4-8 AH    | YES                 |
| PSC-122000A-C   | 1800            | 12               | 8-20 AH   | YES                 |
| PSC-124000A-C   | 4000            | 12               | 20-40 AH  | YES                 |
| PSC-1210000A-C* | 10000           | 12               | 40-100 AH | NO                  |
| PSC-241000A-C   | 1000            | 24               | 5-10 AH   | YES                 |

\* Please note the PSC-1210000A-C is only available for use with input voltages of 90-132V 60 Hz. This charger is ideally suited for batteries from 40-100AH.

## Notes

Recharge time depends on the depth of the preceding discharge and the output current of the charger. To determine the approximate recharge time of a fully discharged battery, divide the battery's amp. hrs. by the rated output current of the charger and multiply the resulting number of hours by a factor of 1.75 to compensate for the declining output current during the charge cycle. If the amount of amp. hrs. discharged from the battery is known, use it instead of the battery's capacity to make the calculation.

To ensure safe and efficient operation always refer to our Charger Operating Instructions, as published on our website.

**When charging batteries in series** (positive terminal of one battery is connected to negative of the other) all batteries in the string will receive the same amount of charge current, individual battery voltages may vary.

**When charging batteries in parallel** (positive terminals are connected with positive terminals, negative terminals with negative), all batteries in the string are subject to the same charge voltage, but the charge current each battery receives can and will vary until equalization is reached.



**Power-Sonic does not offer chargers for batteries with capacities higher than 100 AH. If you have any queries or difficulties in locating a suitable charger for batteries above 100AH, our Technical department will be happy to help.**

## Contact Information

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