

Features

- Universal input 100-240VAC
- Output Power: 36-144W
- Plastic Enclosure
- Approved to UKCA, CE
- LVD & EMC Class B Certified, RoHS & REACH compliant
- 12V Lead Acid 3 Stage Control (Fast/Normal/Float)
- OVP, OCP, OTP & Short Circuit
- Dimensions: Dependent on Model
- Weight: Dependent on Model
- Six-Sided Shielding



Ideal Power's 31ACWW12A Range of 12V Lead Acid Battery Chargers Series are certified to UKCA, CE, RoHS, REACH & EN 62368-1 Standards and comply with the relevant Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

| Models | 31AC0312A | 31AC0412A | 31AC0512A | 31AC0612A |
|----------------------|--|-----------|-----------|-----------|
| Output Max Current | 3A | 4A | 5A | 6A |
| Output Power | 36W | 48W | 60 | 72 |
| Models | 31AC0712A | 31AC0812A | 31AC1012A | 31AC1212A |
| Output Max Current | 7A | 8A | 10A | 12A |
| Output Power | 84W | 96W | 120W | 144W |
| Input Voltage | 100V ~ 240V universal | | | |
| Input Frequency | 47Hz ~ 63Hz | | | |
| Output Equalizer | 14.6 Vdc ± 0.2 V | | | |
| Output Float | 13.7 Vdc ± 0.2 V | | | |
| Max Charging Current | 2A +/- 0.2A | | | |
| Working Temperature | 0 ~ 45 °C | | | |
| Hold up Time | 8 ms at full load output power and 115 Vac input | | | |
| Battery Application | Lead Acid Battery | | | |
| LED – Power on | Red | | | |
| LED – Charging | Orange | | | |
| LED - Charged | Green | | | |
| Mains Lead | 1.8M EURO Plug + 1.8M UK Fuse Plug | | | |
| DC Cable | SPT2, 18AWG 2C at 1.2M mount clips | | | |
| Dimensions | 180 x 88 x 47 (LxWxH) mm | | | |
| Weight | 0.8 (Kgs) | | | |
| Safety | CE, CUL | | | |

Specifications subject to change without notice.

Applications

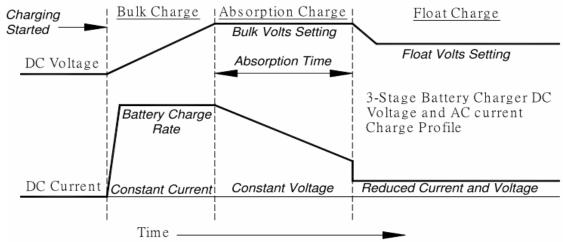
Fire trucks

- Occurrence
 Occurrenc
- Vacuums Pumps
- O Household items
- O Power generators
- Sailing boats
- © Emergency vehicles
- © Communication Equipment's

 Automobiles
- ∪PS
- © Electrical car & bicycles
- O Power Inverters
- Ambulance
- Mobile command centres



Three Steps of Charging & Charge Curve



- Step 1 Bulk charge bring batteries to 75% capacity fast.

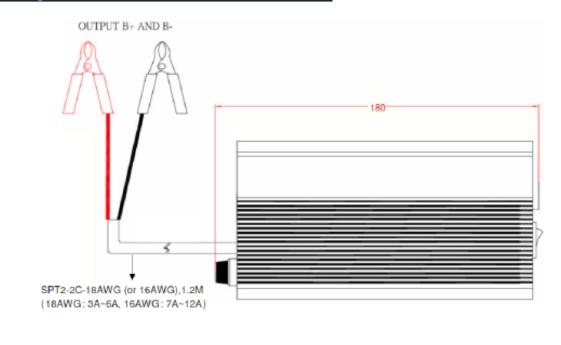
 During this stage charging occurs at full power, which means maximum current, until the battery voltage reached the set limit.

 Step 2: Absorption Charge, boost slow the current flow, adjusting for maximum efficiency and gently topping off
- Step 2: Absorption Charge, boost slow the current flow, adjusting for maximum efficiency and gently topping off batteries. During absorption charging the current decreases as the battery approached full charge.
- Step 3 Trickle Charge for longer period, maintains fully charged batteries without harmful effects of overcharging and cooking.

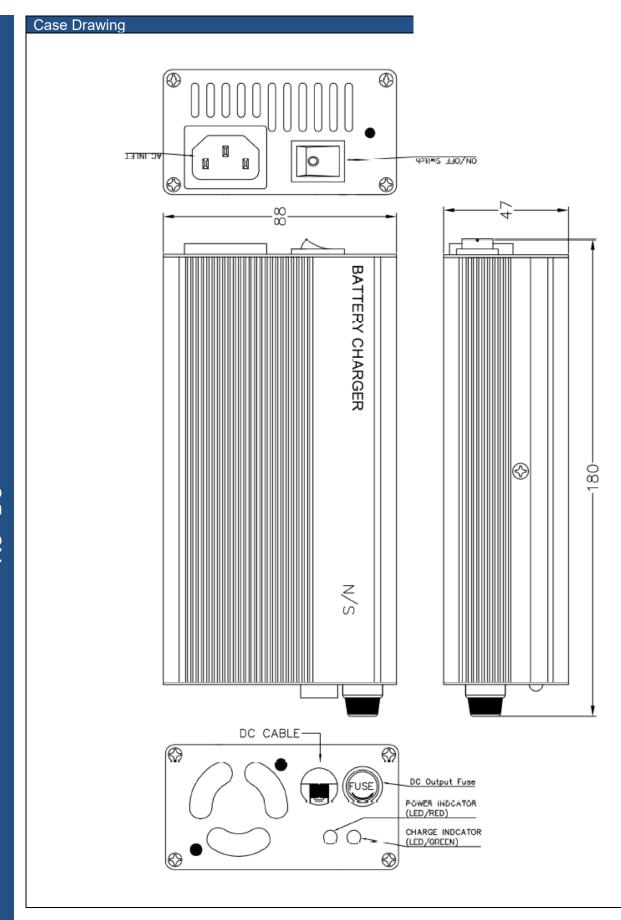
Trickle charge is intended to keep the battery in a fully charged state and compensates for self-discharge. When the current reaches setting point the battery switches

to a maintenance charge at a constant voltage. Should the battery be in use and the charge current Subsequently exceed setting point the charger will automatically return to the beginning of the three-step charge characteristic.

Case Drawing







Ideal Power Limited



