

# Blue Power Battery Charger IP 20: the highest efficiency ever

180-265 VAC

[www.victronenergy.com](http://www.victronenergy.com)



**Blue Power Battery Charger  
IP 20 12/15**

### The highest efficiency ever!

Setting a new industry standard: with 93% efficiency or better, these chargers waste **three to four times less heat**.

And once the battery is fully charged, power consumption reduces to less than a Watt, some **five to ten times better** than the industry standard.

### Adaptive 4-stage charge algorithm: bulk – absorption – float – storage

The Blue Power charger features a microprocessor controlled 'adaptive' battery management. The 'adaptive' feature will automatically optimise the charging process relative to the way the battery is being used.

### Less maintenance and aging when the battery is not in use: the Storage Mode

The storage mode kicks in whenever the battery has not been subjected to discharge during 24 hours. In the storage mode float voltage is reduced to 2,2 V/cell (13,2 V for a 12 V battery) to minimise gassing and corrosion of the positive plates. Once a week the voltage is raised back to the absorption level to 'equalize' the battery. This feature prevents stratification of the electrolyte and sulphation, a major cause of early battery failure.

### Totally silent

Models up to 12/15 and 24/8: no fan.

Models 12/25 and 24/12: small inaudible low rpm fan, temperature controlled.

### Protected against overheating

Output current will reduce as temperature increases up to 60°C, but the Blue Power charger will not fail.

### Two LED's for status indication

Yellow LED: bulk charge (blinking fast), absorption (blinking slow), float (solid), storage (off)

Green LED: power on

### Learn more about batteries and battery charging

To learn more about batteries and charging batteries, please refer to our book 'Energy Unlimited' (available free of charge from Victron Energy and downloadable from [www.victronenergy.com](http://www.victronenergy.com)).

| Blue Power Charger IP 20           | 12/7 (1)<br>12/10 (1)<br>12/15 (1)  | 12/25 (1)                      | 24/5 (1)<br>24/8 (1)                                 | 24/12 (1)                        |
|------------------------------------|---|--------------------------------|--|----------------------------------|
| Input voltage range                | 180-265 VAC or 250-350 VDC  |                                |  |                                  |
| Efficiency                         | 94%   | 92%                            | 95%  | 93%                              |
| No load power consumption          | 0.5W  | 0.5W                           | 0.5W   | 0.5W                             |
| Frequency                          | 45-65 Hz or DC  |                                |  |                                  |
| Number of outputs                  | 1   | 1                              | 1  | 1                                |
| Charge voltage 'absorption' (V DC) | 14,4  | 14,4                           | 28,8   | 28,8                             |
| Charge voltage 'float' (V DC)      | 13,8  | 13,8                           | 27,6   | 27,6                             |
| Charge voltage 'storage' (V DC)    | 13,2  | 13,2                           | 26,4   | 26,4                             |
| Charge current (A)                 | 7 / 10 / 15   | 25                             | 5 / 8  | 12                               |
| Charge characteristic              | 4-stage adaptive  |                                |  |                                  |
| Minimum battery capacity (Ah)      | 24 / 30 / 45  | 75                             | 16 / 24  | 45                               |
| Can be used as power supply        | Yes   |                                |  |                                  |
| Protection                         | Battery reverse polarity (fuse)   |                                | Output short circuit                                 | Over temperature                 |
| Operating temp. range              | -20 to +60°C (full rated output up to 40°C)   |                                |  |                                  |
| Humidity (non condensing)          | Max 95 %  |                                |  |                                  |
| <b>ENCLOSURE</b>                   |   |                                |  |                                  |
| Material & Colour                  | Aluminium (blue RAL 5012)   |                                |  |                                  |
| Battery-connection                 | Black and red cable of 1,5 meter with battery clamps                                | Black and red cable of 1 meter | Black and red cable of 1,5 meter with battery clamps | Black and red cable of 1,5 meter |
| 230 V AC-connection                | Cable of 1,5 meter with CEE 7/7 plug, BS 1363 plug (UK) or AS/NZS 3112 plug (AU/NZ) |                                |  |                                  |
| Protection category                | IP 20   |                                |  |                                  |
| Weight (kg)                        | 1,3   |                                |  |                                  |
| Dimensions (h x w x d in mm)       | 66 x 90 x 235   |                                |  |                                  |
| <b>STANDARDS</b>                   |   |                                |  |                                  |
| Safety                             | EN 60335-1, EN 60335-2-29   |                                |  |                                  |
| Emission                           | EN 55014-1, EN 61000-6-3, EN 61000-3-2  |                                |  |                                  |
| Immunity                           | EN 55014-2, EN 61000-6-1, EN 61000-6-2, EN 61000-3-3                                |                                |  |                                  |