

BC SMART 10000



BC Smart 10000 is the most powerful battery charger in the BC range and it is ideal for the maintenance of all 12V batteries. One of the best innovation of this charger is its four charging modes among which users can select: in fact, it features two specific charging programs for car and bike batteries (CAR and BIKE), a program designed for Start&Stop batteries and the Power Supply program for the battery replacement. It is ideal for the recovery, the charge, the desulfation, the maintenance and the analysis of all 12V batteries, and it can be left always connected to the battery, without any risks or the need to disconnect it from the vehicle, so that it can be kept always charged during long periods (even months) in which it is not used. BC Smart 10000 has two extremely innovative features: the 12V Power Supply program allows to supply the devices on board cars and bikes (radio, watch...) when replacing the

battery, without losing the data storage. The function of automatic temperature compensation, instead, allows to give the battery the ideal charge according to the ambient temperature, thanks to the integrated sensor. The battery charger supplies a maximum current of 1 Amp for the BIKE mode, 10 Amp for the CAR or Start&Stop mode, and it automatically executes a charging algorithm of 8 cycles, for the recovery of highly discharged batteries (starting from 1,25 V), the charge, the desulfation and the maintenance of all 12V batteries (traditional, gel, sealed...). Its differentiated charging programs make it compatible with batteries having a capacity from 3 to 200 Ah. Moreover, it is possible to select the charging program for AGM Start&Stop batteries.

Two LEDs indicate the charging cycle which is being executed and any working anomalies; the LED bar includes a voltmeter to check the battery state of charge in real time. The battery charger does not produce any sparks and it is protected against short circuit, polarity inversion, overcharge and overheating. The package include a waterproof cable with eyelets (cod. STD2V), to be left always installed on board vehicle and a cable with isolated clamps (cod. 30AMPZ). A 12/18 mm universal adapter (cod. ACC612V - optional) is also available, for the charge of the battery from the cigar lighter socket. Warranty is extended to 3 years.

-  **2 SPECIFIC CHARGING PROGRAMS FOR CAR AND MOTORCYCLE BATTERIES**
-  **DEDICATED CHARGING PROGRAM FOR AGM START & STOP BATTERIES**
-  **POWER SUPPLY MODE FOR MEMORY SAVING WHILE REPLACING THE BATTERY**
-  **AUTOMATIC TEMPERATURE COMPENSATION TO OPTIMIZE THE CHARGING PERFORMANCE**



TECHNICAL DATA

Input Voltage
Charge Voltage
Charge Current
Charging Algorithm

Types of Batteries

Battery Capacity

Operating Temperature
IP Class

BC SMART 10000

220÷240 Vac, 50÷60 Hz
13.8 V / 14.4 V - nominal 12 V
10 A max
8 cycles, automatic (Initialization, Recovery, Soft Charge, Bulk Charge, Desulfation, Battery Analysis, Maintenance and Equalization)
12 V Lead Acid
(Traditional/Wet, Gel, MF, VRLA, AGM, Ca/Ca, etc.)
3-100 Ah (Bike Mode)
40-200 Ah (Car/Start&Stop Mode)
from -20° to +50°C

 Weatherproof - Protection against water splash IP44. Suitable for outdoor use



Featuring wall mounting system with fast dismounting

8 CYCLES CHARGING TECHNOLOGY

BC SMART 10000 is managed by a **latest-generation microprocessor**, which is in charge of monitoring the battery parameters in real time and to execute a **new multi-cycle charging algorithm**:

1. **Initialization**: the device checks if one or more cells are shorted, in order to verify that the battery is in a proper condition to be recharged/recovered.
2. **Recovery**: if the battery is deep discharged (battery voltage starting from 1.25 V), the device tries to recover it, taking it back to a higher voltage.
3. **Soft Charge**: if the battery is in a condition of significant undercharge, the device provides a light pulsing current to the battery, to overcome this critical phase.
4. **Bulk Charge**: the device provides full current to the battery, recovering about 85-90% of the battery capacity.
5. **Desulfation / Absorption**: the device provides a "controlled overcharge" to recover the remaining 10-15% of the battery capacity, through the desulfation/recovery the lead-acid cells (for low or medium sulfation).
6. **Battery Analysis - End Cycle Test**: the device stops providing current to the battery for a short time, in order to verify whether the battery is able to retain the charge received. This test is periodically repeated during the Maintenance.
7. **Maintenance**: the device keeps the battery in the best charge conditions for very long periods (even months) during which your vehicle is left unused, without any possible drawback (battery overcharge, battery overheating, water and/or electrolyte loss, etc).
8. **Equalization**: every 30 days during long term maintenance, the device executes an equalization charge in order to balance the battery lead-acid cells, avoiding electrolyte stratification within the cells.

SAFETY AND PROTECTIONS

BC SMART 10000 features a series of **8 protections and active guard mechanisms** that make it easy to install and to use, without any risks even for users without expertise:

- **No interferences the vehicle's on board electronics** (control unit, ABS, GPS...)
- Protection from output lines short circuit, even for an indefinite time: **no sparks!**
- Protection from battery polarity inversion
- Protection from battery overcharge/overheating
- Thermal protection from overtemperature
- No need to disconnect the battery from your vehicle
- Very few gas development during the charge: no need to remove the battery plugs

Laboratory Tests ensure the manufacturing of products in conformity to the regulations in force on safety and electro-magnetic compatibility. Norms and Regulations: EN55014-1, EN55014-2, EN60335-1, EN60335-2-29, EN61000-3-2, EN61000-3-3.

BATTERY TYPES AND CAPACITY

BC SMART 10000 is specifically designed for charging and maintaining **all 12V lead-acid batteries** currently available on the market (traditional, VRLA, MF, AGM, GEL, Ca/Ca, etc). BC SMART 10000 is addressed to **recharge and maintain batteries with a capacity from 3 to 200 Ah** (starting from 40 Ah with Car Mode and Start&Stop Mode).

EQUIPMENT & ADD-ONS

The package includes:

- the battery charger **BC SMART 10000** for long term battery maintenance, provided with a 220V power cable (2 meters long) and a battery output cable;
- **STD2V** waterproof battery cable with eyelets, which can be left always installed on board;
- **30AMPPZ** battery cable with clamps;
- according to the selected kit, the universal 12/18mm cigar socket adapter (cod. **ACC612V**) may be included;
- a copy of the User Manual.