## Warranty Terms

Warranty valid for 12 months (one year), starting from the date of purchase, if purchased from an authorized Marts Digital dealer. Will be covered by warranty components and/or parts comproved that shows failures in process manufacture or damaged components.

Warranty **don't** cover:

-Equipment, parts or components previously altered by unauthorized people.
-Damages caused by accidents (fall, crash, etc) or natural disasters (overflow, burning, etc).
-Improper instalation (improper wiring, abuse, installation out of specifications).
-Shipping costs.

In case needed any repair, contact the dealer for warranty instructions.

IMPORTED BY:
DIGITAL MARTS
AUTOMOTIVE ACCESSORIES

Fone: +55 (11) 998-551-605
CNPJ: 41.190.197/0001-56

OBS: If out of warranty, repair costs (if needed) will be charged from client.

e-mail: sac@digitalmarts.com.br

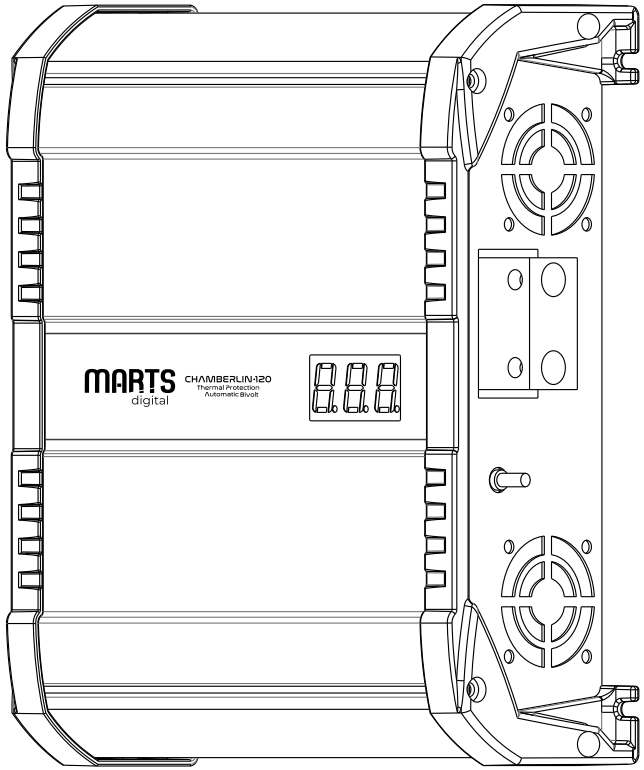
Marts Digital reserved rights to alter characteristics of the product without previously advice.

Warranty registration:

Name:.....
Register:..... Date:..... Phone:.....
Address:.....
Store:..... Phone:.....

MARTS digital

# *Power Supply and Battery Charger CHAMBERLIN 120*




Illustrative images

**Instructions manual**
**Read before install**

# Index

Presentation..... 1
Description..... 2
Installation..... 3
Expert Charge System..... 4
Display and Checking..... 4
Dimensions..... 5
Technical Specifications..... 6

**Presentation**

Read the all the manual before install the  CHAMBERLIN 120, for getting a good performance. Keep the manual on safe and easy access local for future references or doubts.

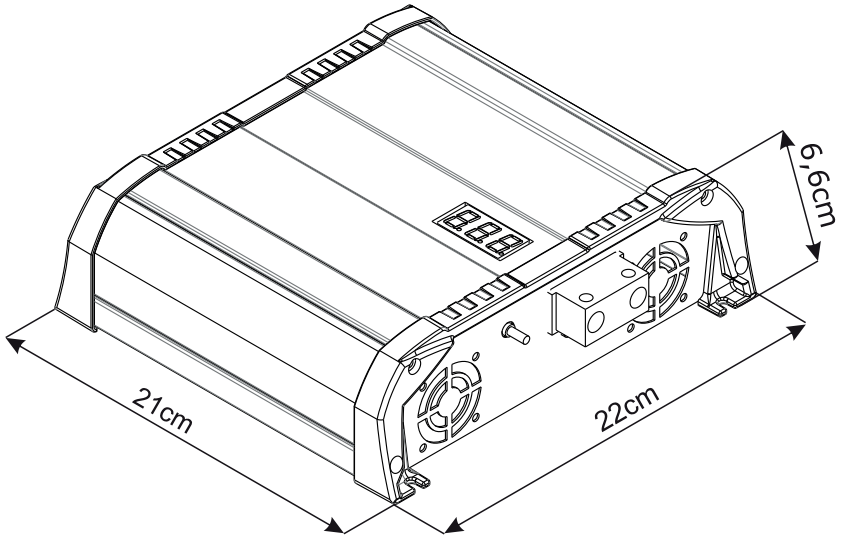


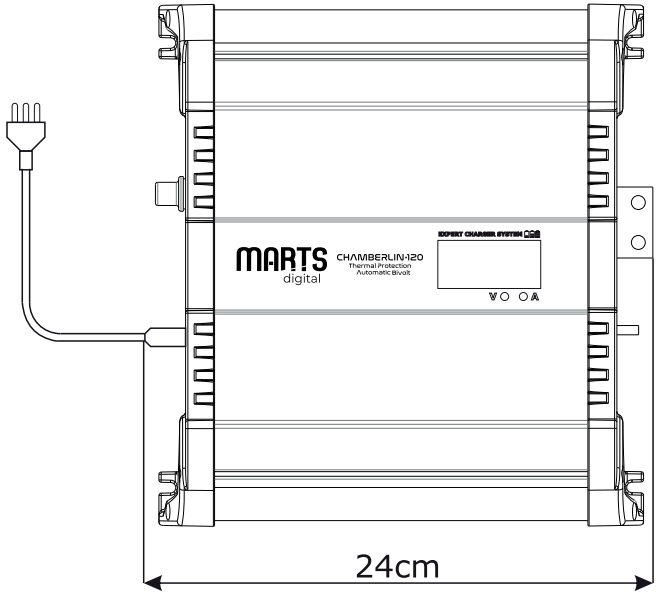
# Technical Specifications

| | |
|---|---|
| Voltage Input | Auto 127/220Vac |
| Max Voltage Range 127Vac | 90 ~ 140Vac |
| Max Voltage Range 220Vac | 160 ~ 260Vac |
| Max Consuption Input 127Vac | 25A |
| Max Consuption Input 220Vac | 12A |
| Max Power Input | 1900W |
| Max Power Output | 1700W |
| Max Eficiency | 90% |
| Output Voltage | 12.3Vdc a 14.4Vdc |
| Max Current Output | 130A |
| Wire Gauge Input | 3x14AWG |
| Input Circuit Break | 32A |
| Output Terminals | 4AWG |
| Power Strip Recommended | 2x14AWG until 30m |
| | 2x12AWG until 50m |
| Dimensions | 240x220x66mm |
| Weight | 2,750Kg |

*These typical datas can receive some minimal variations.

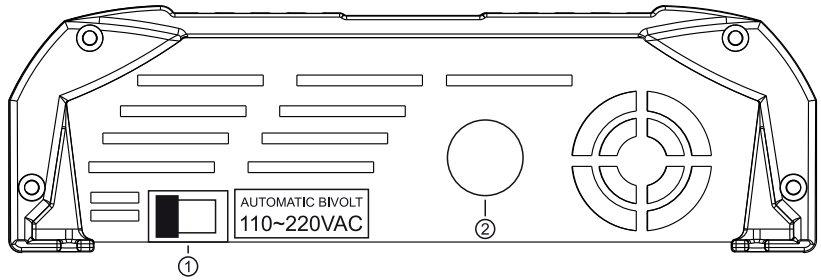
## Dimensions






## Description

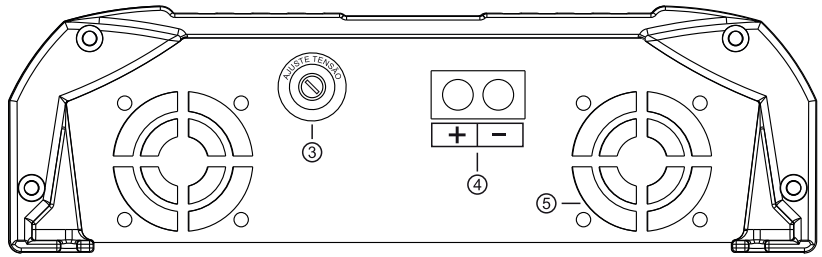



### 1. CIRCUIT BREAK

Circuit break for equipment protection.

### 2. POWER INPUT

The CHAMBERLIN 120 has **AUTOMATIC BIVOLT** power (127/220Vac).




### 3. VOLTAGE ADJUSTMENT

Voltage output adjustment from 12.3Vdc to 14.4Vdc.

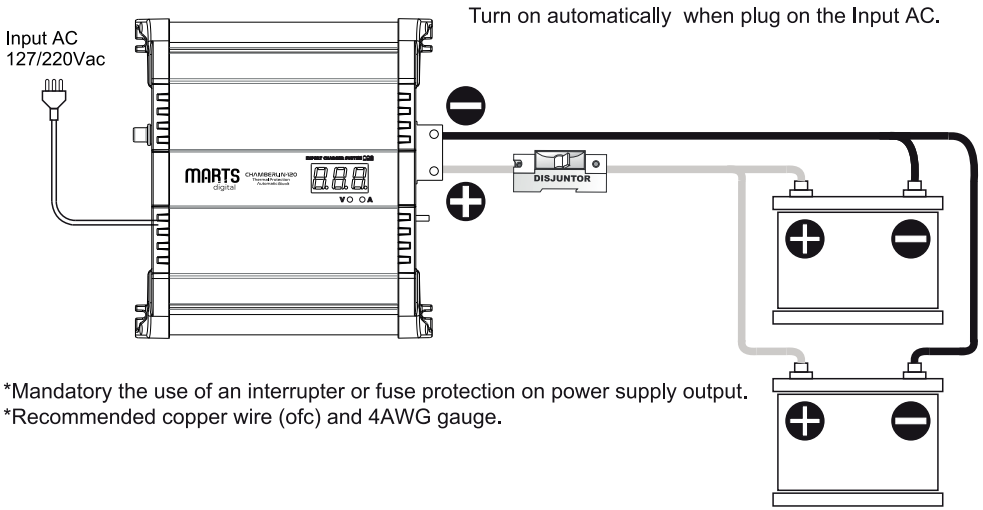
### 4. OUTPUT TERMINAL

Output terminals (+) and (-), connect to battery, bar or device 12V to be feeded.
Never reverse the polarity.
(Connect wire gauge 5AWG Maximum)

### 5. VENTILATION

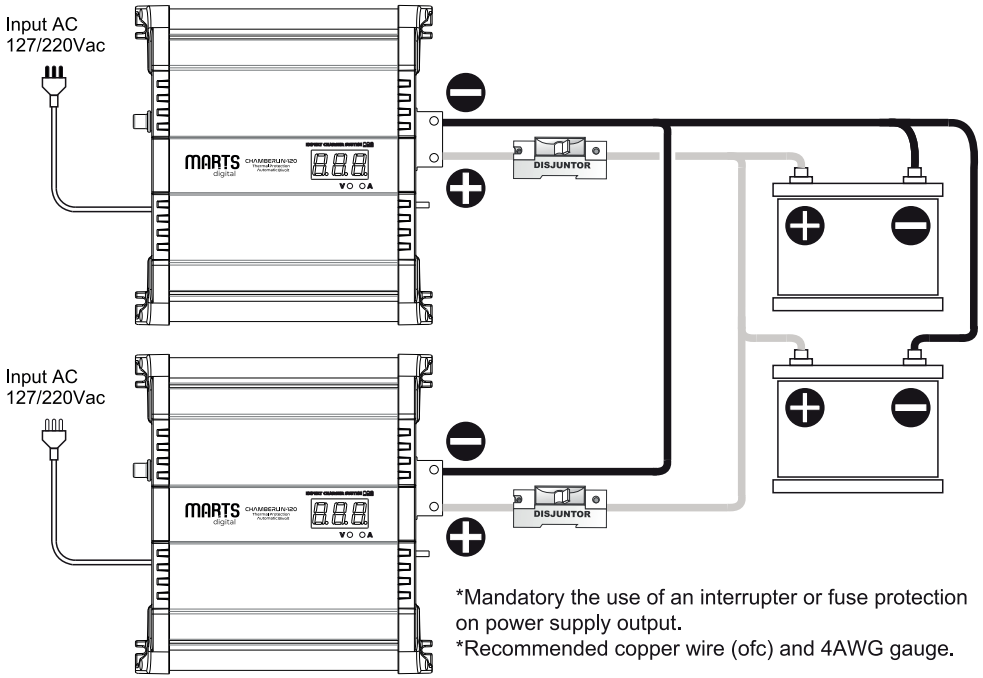
Air input/output to ventilation and temperature reduction.
**NEVER BLOCK THE PORTS.** Leave 5cm or more of space from the device on both sides for a good performance and safe running.
**Smart Ventilation** - The cooler rpm level is variable according with output current for a lower noise and a longer life time.

## Installation




*Mandatory the use of an interrupter or fuse protection on power supply output.
*Recommended copper wire (ofc) and 4AWG gauge.

## Parallel Expert Charge Installation

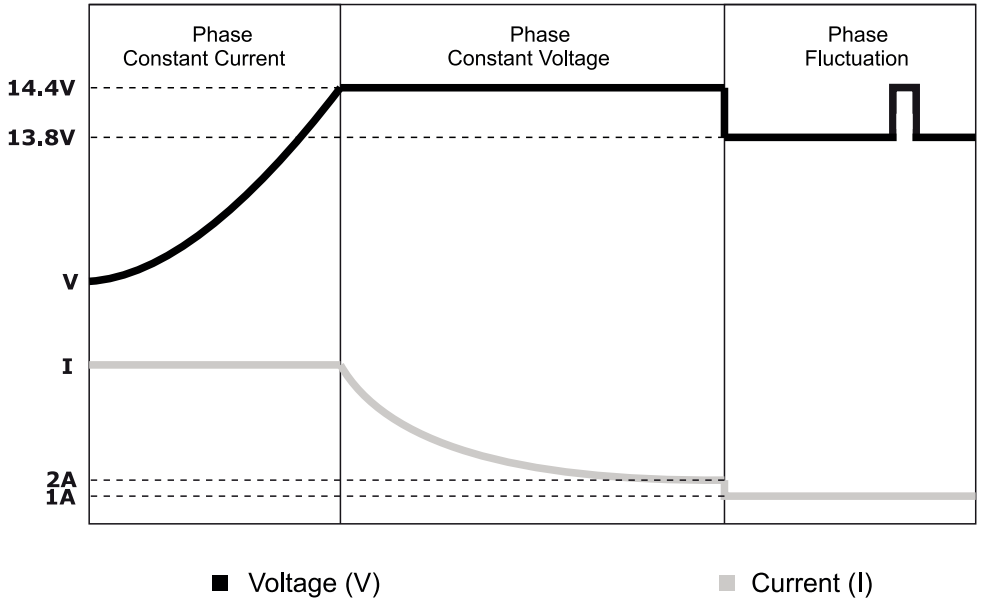



*Mandatory the use of an interrupter or fuse protection on power supply output.
*Recommended copper wire (ofc) and 4AWG gauge.



## Expert Charge System

### Expert Charging Batteries

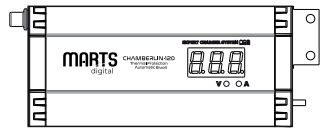



**Constant Current Phase** - The current is constant keeped while the voltage up until the point when happens the electrolyte's decomposition; At the final phase, the battery has around 75~80% of his nominal capacity.

**Constant Voltage Phase** - The voltage keeps 14,4V while the current down slowly ultil 2A. On this phase, the baterry's charge is almost complete. After 1 hour on this condition, the voltage changes from 14,4V to 13,8V, and passed to flutuation mode.

**Flutuation Phase** - On this flutuation phase the vontage keeps on 13,8V during 90 minutes, after this period, the voltage up to 14,4V during 10 minutes, and returns to 13,8V, restarting the flutuation cycle. If the current up to 4A or higher all the timers are reseted.

## Display and Monitoring



**Display -** The display changes often between Voltage and Current to see the values on real time.

*The values on display can be changed until 5% because the temperature oscillations.