

### Presentation

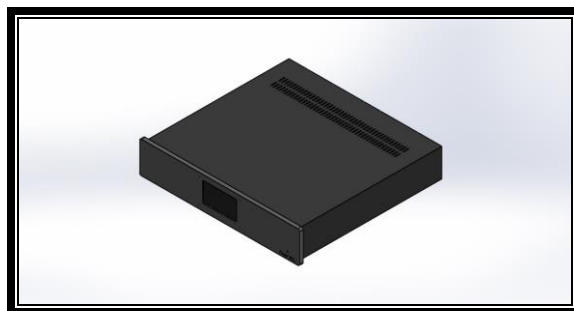
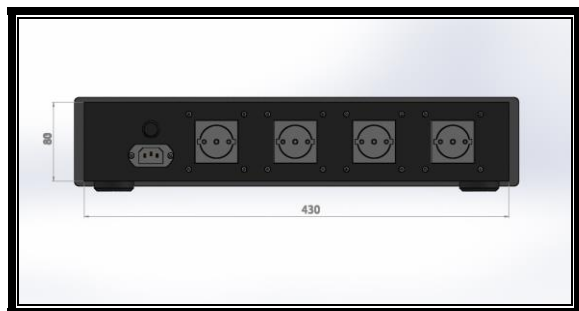
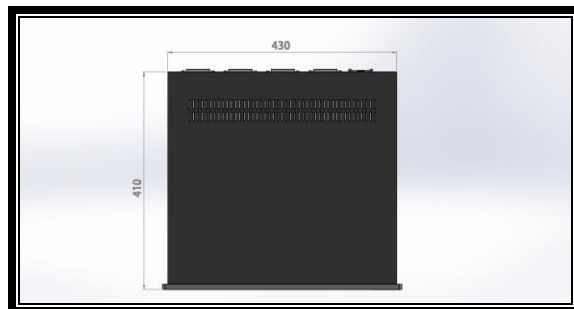
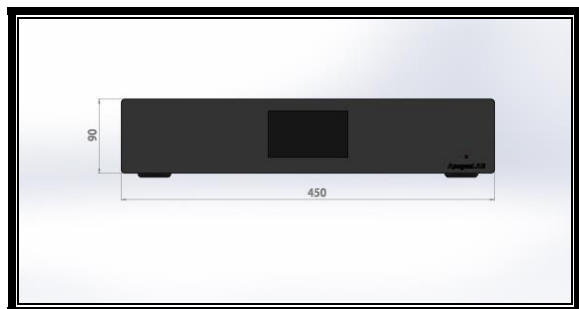
**apogeeLAB** has created a new and revolutionary intelligent ALTERNATE voltage distributor. It is an electronic device that can manage from one to four users with a 220Vac - 240Vac power supply to which a series of interesting automatisms are applied, which we will then briefly illustrate. Sufficiently small in size adds an attractive, simple and minimalist design.

### Product Features

- Four output lines
- Each output line can handle a 220 - 240Vac with a current of 10 Ampere per line.
- Output lines with surge suppressor capacitors and EMI filters, X2 and Y2 class.
- Maximum OUTPUT power 2400 WATTS per line.
- Total maximum OUTPUT power: 9600 WATTS.
- Automatic Overvoltage Protection by uController.
- Automatic timed protection from under voltage by uController.
- Real-time control Vac output lines controlled by uController.
- Real-time control Power Consumption output lines controlled by uController.
- Real-time control of the status of the main fuse from uController.
- Real-time control of the Vac phase, present on the home network
- Internal power supply protected by Short Circuit and reset with button.
- Electronic control of the 220Vac network Phase Check orientation
- User Interface with 4.3 "HMI Touch Screen color LCD screen, with graphic icons.

### Mechanical Information

(All dimension are in millimeters)



## General Description

### What is the *Intelligent Vac Control System* device for?

The **IVCS** device is located in the middle between a common power strip and a network conditioner with the addition of automatisms that make it unique in its kind. It is a reliable and simple solution for those who, for example, do not have too much space to use their system with much more bulky network conditioners. With the **IVCS** the quality of audio is not renounced with all its nuances, thanks to the quality of the filters on the four output lines and a main filter on the input line, with class **X2** and **Y2** capacitors, peak suppressors and EMI filters. The "On Board" automatisms make this device an excellent "companion" to your system.

The automatic **Over Voltage** control instantly protects the users present on the four output lines, thus avoiding a possible damage, sometimes irreparable. The **IVCS** can also automatically check the **integrity of fuse** on the main line, all obviously managed by a reliable controller. The latter has an extremely low resistance, only **0.05 ohms**. The control of the **line voltage** on the four outputs and the actual power absorbed in real time are present thanks to the graphic interface with immediate access, directly on the 4.7 "color display, touch screen and then managed by the controller. The digital menu also includes the actual **orientation of 220Vac phase**, really useful for demanding audiophiles. A small "**HELP**" guide is available on the device, where some features of the **IVCS** are briefly described. A **SETUP** window adjusts the brightness of the display.

Finally, the power supply inside the device is equipped with a **Short Circuit protection circuit**. In this way the uController, the measurement circuits and the HMI Display will be protected from possible damage by Short Circuit. Should the Short Circuit persist, the power supply will remain protected, until the Short Circuit is eliminated. The relay on the output stage is powered by a dedicated power supply, also protected by Short Circuit thanks to special programmable fuses. The latter, with its 50 amperes and three exchanges, was oversized to avoid unpleasant and abnormal current absorption. Miniaturized pilot relays have sealed exchange contacts. In this way they switch their position into an "environment" with an inert atmosphere. Contact bumps and sparks are definitively eliminated, guaranteeing infinite switching.

### Mechanical fit

The device, as can be seen from the graphic, is relatively small. The space it will occupy measures only **430mm in width by 410mm in length, for a height of 80mm**. Its low profile makes it appealing especially for the front panel, characterized only by the 4.7 "color Touch Screen display and a small "hidden" red LED diode, inside the black anodized aluminum panel, with a thickness of 4 mm. The LED has the functionality to indicate to the user a possible C / C or a first switch-on of the device, or lack of the main mains voltage. The rear panel includes the four output lines with **SHUKO 10/16** sockets, the VDE tray dedicated to supplying the **IVCS**, a black pannel fuse holder and a gold-plated screw terminal, for a possible TURN DISC.