CLAIMS

1) An autonomous electronic device for surveillance and monitoring of an area, which comprises the following: (i) means for data collection from the specific area, (ii) means for processing the collected data, (iii) means for transmitting the processed data and for the exchange of information with one or more remote servers and (iv) means for access control in this area;

wherein the autonomous electronic device does not comprise a voltage regulator, but comprises a Zener diode, the Zener diode serially connected to a resistance, the resistance configured to vary according to energy needs of the autonomous electronic device; and

wherein the autonomous electronic device is configured to operate at with power less than 4 mW.

2) An autonomous electronic device in accordance with claim numbered one above, characterized in that it comprises a controller, which can be programmed to manage various local electrical and / or electronic devices.

3) An autonomous electronic device in accordance with claims numbered one and two above, characterized in that it is capable to perform remote intervention to connected devices.

4) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to three, characterized in that it is operated exclusively by electric power available to any type of telephone lines.

5) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to four, characterized in that it uses a same telephone line for energy as for communication with the server.

6) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to five, characterized in that it provides an alternative serial communication option with the server.

7) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to three, characterized in that it also has an alternative energy source.

8) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to seven, characterized in that it is capable to control the access in an area, using the I-button technology for user authentication.

9) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to eight, characterized in that it has the ability to keep in records at minimum 1,000 authorized users and to allow access to them, even when there is a communication interruption with the server.

10) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to nine, characterized in that it has the possibility to save (store) energy in a supercapacitor.

11) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to ten, characterized in that it has the ability to lead an electromagnet and / or a low-power servomechanism to control the existing mechanical lock and to allow the user to unlock it manually.

12) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to eleven, characterized in that it can be used as a communications interface, among remote devices which feature a serial port control.

13) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to twelve, characterized in that it is mainly used in all unmanned areas, where electromechanical or electronic systems are installed.

14) An autonomous electronic device in accordance with any of the above mentioned claims numbered one to thirteen, characterized in that it is installed inside a telecommunications cabin, containing active or passive equipment.