Relay Control through TCP/IP protocol

Raspberry Pi 3 computer-based controller

It allows the control of up to 3 Bollards via TCP/IP. The raspberry computer runs a special version of Linux configured for handling IoT devices. This way you can control up to 3 Bollards. The control is both local through an external keypad, as well as remote via wired ethernet network or via WiFi.

1. DHCP
   It supports DHCP protocol, to dynamically obtain the IP address.

2. WIFI
   It has the option to connect via WiFi network.

3. WEB BROWSER
   Control of IoT devices via a friendly network interface.
**IoT based Control Software**

The relay control is implemented through the famous IBM IoT software: Node-Red.

Node-RED is a programming tool to connect hardware devices, APIs and online services quickly and easily. This software is used to create relay control via a web page. Two relays are required for the control of a Bollard. The system is programmed to operate each Bollard individually or as a group. The internal wiring of the system allows each Bollard to also be controlled externally through a keypad.

“Manual and remote bollard control”

The system is housed inside a NEMA IP66 cabinet. Internally, the Raspberry Pi 3 controller is located with a small Touch display, as well as the relay card and wiring terminals that allow the connection of up to 3 Bollards with their respective keypads. The power is external through a 110VAC / 5 VDC 3 AMP wall plug power supply.

**INSTALLATION REQUIREMENTS**

ABS NEMA IP66 cabinet. External measurements are 7-55 / 64 "long by 5-57 / 64" wide by 3-59 / 64 "high.

It has three glands at the bottom for the connection of:

1.- Bollards.
2.- Buttons.
3.- Power and ethernet network.