PROGRAM UPLOAD MANUAL FOR PLC SIEMENS

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# OBJECTIVE OF THE MANUAL

The purpose of this manual is to provide a clear and detailed guide for loading a program into a Siemens PLC controller.

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# STEPS FOR CORRECT CONFIGURATION

* Make sure TIA Portal software is installed on your computer
* Have PC and PLC & HMI connected
* Data of the Siemens device models
* Knowledge of the IPs of the Siemens devices
* Be connected with ethernet cable to PLC

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# MATERIALS

1. PC
2. PLC Siemens
3. Cable Ethernet

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# DEVELOPMENT

## **1.- Communication Configuration**

First we must configure the communication with the PLC and our PC, for this we will go to the Control Panel and click on Network and Sharing Center.



Let's click on Ethernet connections



A window opens where we click on Properties (it may ask for administrator access to enter)



Double click on Internet Protocol Version 4 (TCP/IPv4) and another window opens



In the next section we are going to enable Use the following IP adress

We are going to place ourselves in the same network segment in which the PLC is and the same Subnet mask of the PLC and click on OK



A quick test that the PLC and HMI can be seen on the network is to open the CMD and use the ping command (the PLC's IP)



In this example the PLC IP is 192.168.100.20 (use the one corresponding to the PLC)

## **2.- Software Tia PORTAL**

Open Tia PORTAL software and clic on Browse



We are going to look for the program file where the user has saved it



When the following window opens we click on Project view



we will have the following view



To load the program we will click on the PLC on the right side of the Project tree



Then click on the Download to Device icon, which is located in the toolbar



The following window will open and clic on Start search



We will find our devices

Click on the plc, we can click on flash led to check that it is the PLC to which we are connecting

Finally click on load



In the next window make sure that the Stop all mode is set in the stop modules part of the window, then click on load



We wait for the load and in the next window click on finish and the load is complete.



For the case of hmi

To load the program we will click on the HMI on the right side of the Project tree



Then click on the Download to Device icon, which is located in the toolbar



The following window will open and clic on Start search

We follow the same steps that were used for the PLC