Support

Models supported include ECAT-2601

Warranty

All products manufactured by ICP DAS are warranted against defective materials for a period of one year from the date of delivery to the original purchaser.

Warning

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Contact Us

If you have any questions, please feel free to contact us. We will respond within 2 working days.

Email: service@icpdas.com

ECAT-2601

User guide for Firmware Update

Version: 1.0/ Updated: Jun. 2025

Ch.1. Setting up the ECAT-2601

Ch. 2. Firmware Update Procedure

Ch. 3. Troubleshooting

Ch. 4. Additional Information



EtherCAT

ICP DAS CO., LTD.
Website: http://www.icpdas.com

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1. Setting up the ECAT-2601

Before updating the firmware, please ensure that the network settings for both your host computer and any ECAT-2601 series modules are correctly configured, or the update procedures via the Ethernet network may not function correctly.

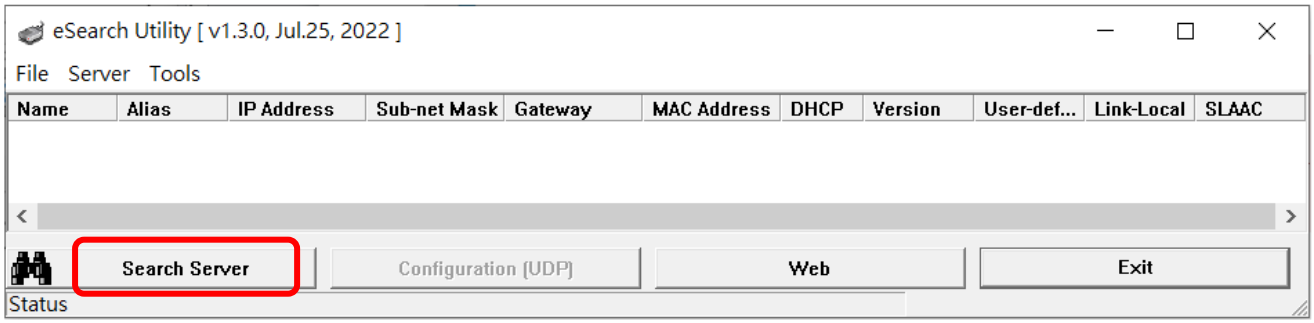
Step 1: Connect the ECAT-2601 to the same hub or the same sub-network as your Host PC, and attach a power supply to the ECAT-2601. Do not connect the ECAT-2601 to a router or directly to the Internet as this may cause the update process to fail.

Please refer to ECAT-2601 Quick Start Guide for more detailed information.

Download the Quick Start Guide.

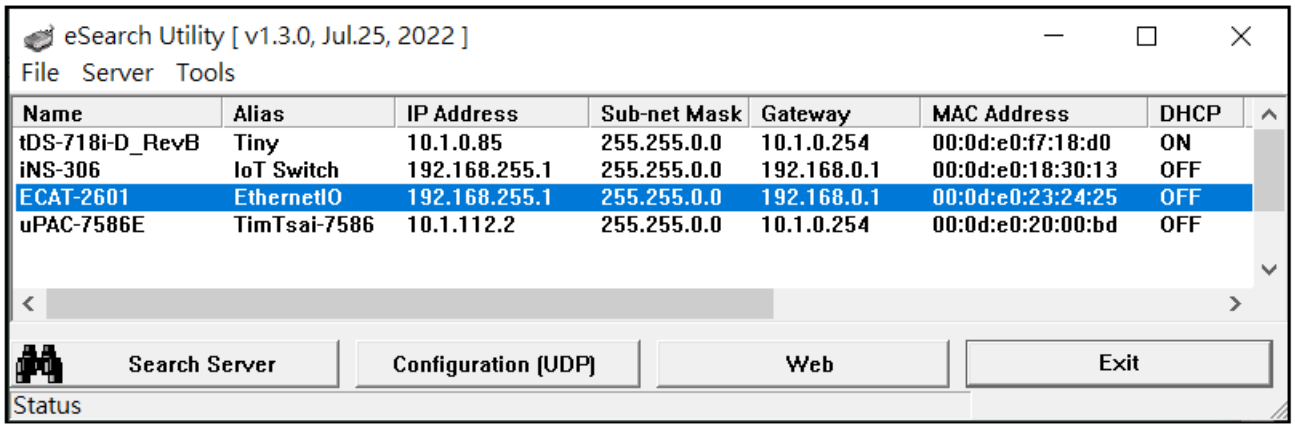
Step 2: Install the eSearch Utility on your Host PC, and then run the Utility to search for any ECAT-2601 module connected to the network.

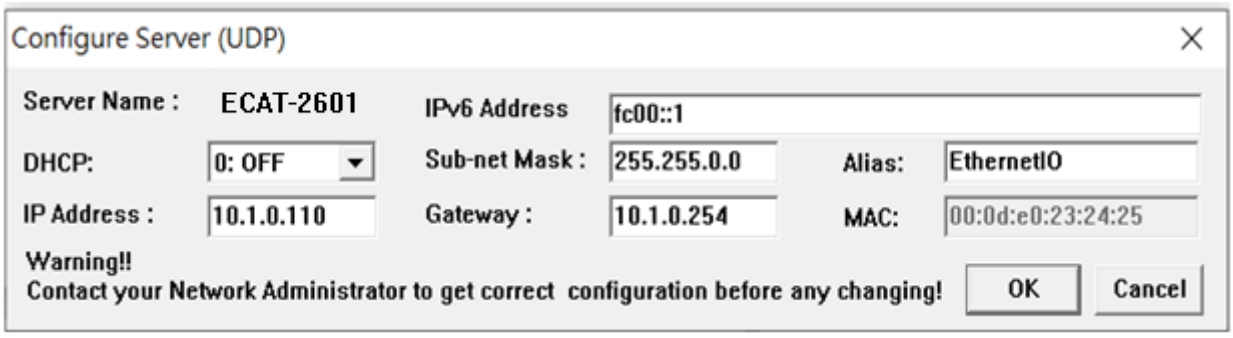
Download the eSearch Utility.



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Step 3: Configure the correct network settings for the required ECAT-2601 module.





Step 4: Download the latest of ECAT-2601's Firmware.

Download the Firmware File.

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2. Firmware Update Procedure

The firmware update can fail when the computer has multiple network interfaces (e.g., LAN and Wi-Fi). Therefore, enable only one network interface for updating the firmware, and temporarily turn off other network interfaces, firewalls, and anti-virus software first.

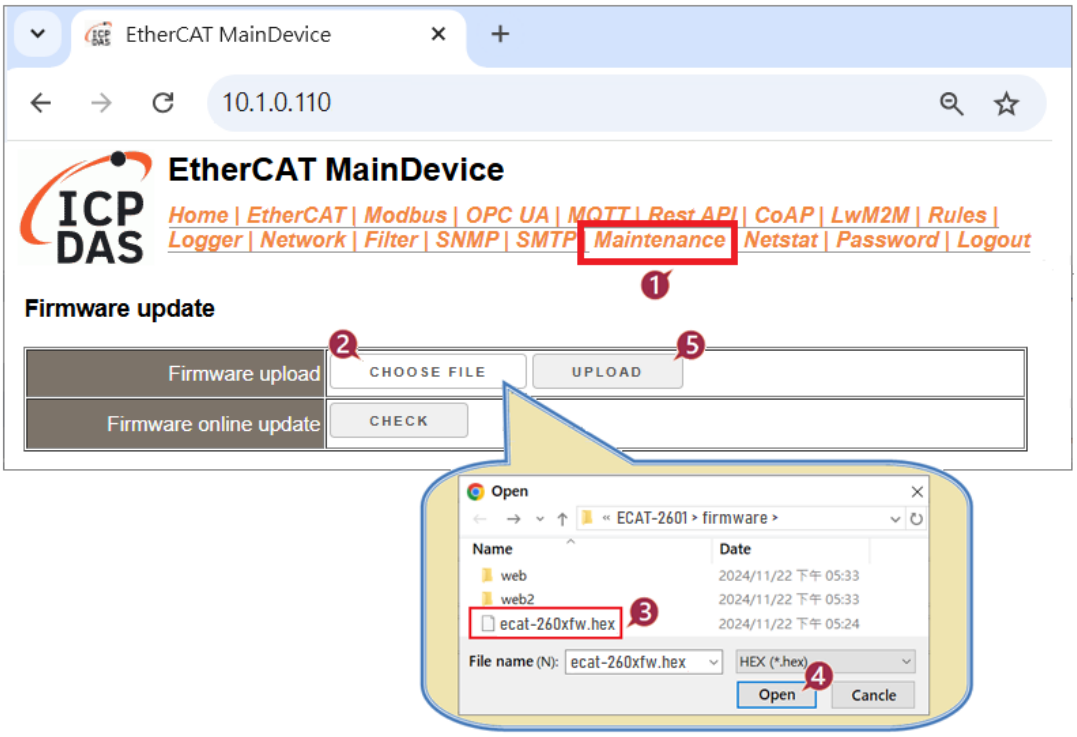
Step 1: In the eSearch Utility, click the "Search Servers" button to search the for any ECAT-2601 modules connected to the network . (The network settings of the ECAT-2601 module as described in Step 3 on Page1)

Step 2: Open the browser interface (e.g., Google Chrom or Internet Explorer, etc.), and enter the IP Address of ECAT-2601 in the address bar for access the ECAT-2601's management interface.

Step 3: Click "*Maintenance*" page, find the "Firmware Update" colum and click the "CHOOSE FILE" button, it will be display the open file dialog box.

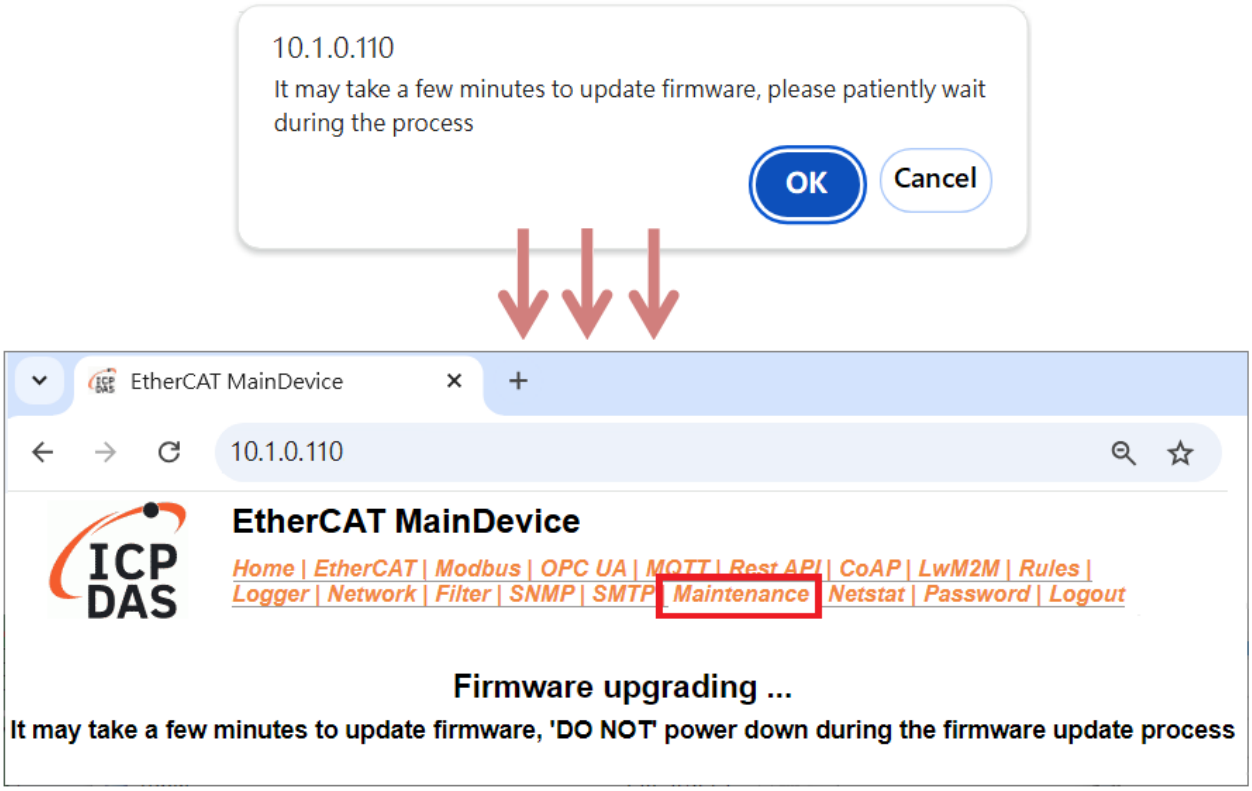
Step 4: In the "Open" dialog box, select the firmware file (gw2500.hex) that will be used to update the module and then click the "Open" button.

Step 5: Click the "UPLOAD" button, it is going to update process.

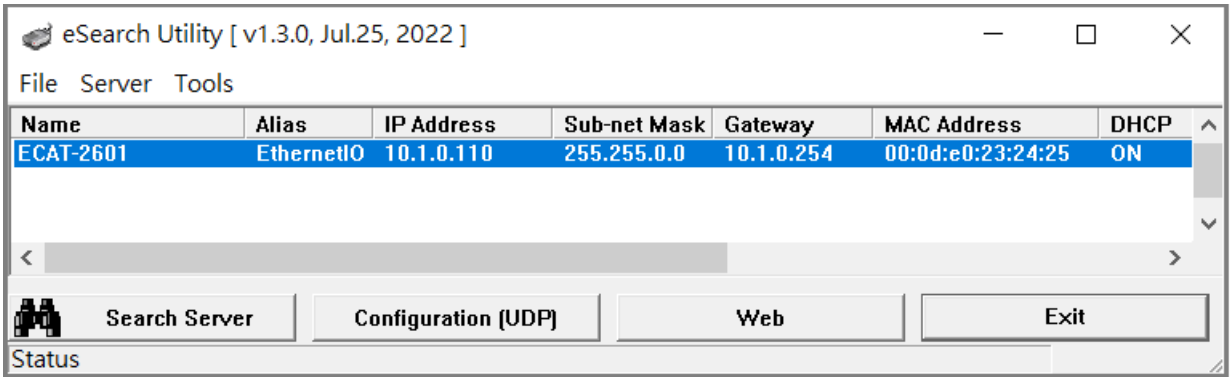


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Step 6: Click the "OK" button.



Step 7: In the eSearch Utility, click the "Search Servers" button to search again to check Whether it can work or not. *Note that the network settings for the module may need to be reconfigured after updating the firmware*.

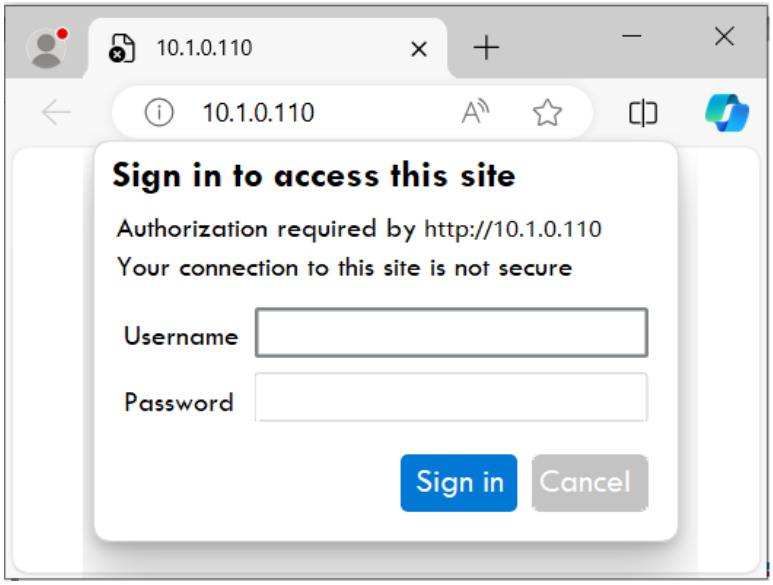


Step 8: Open the browser, and enter the IP Address of ECAT-2601 in the address bar for access the ECAT-2601's web server.

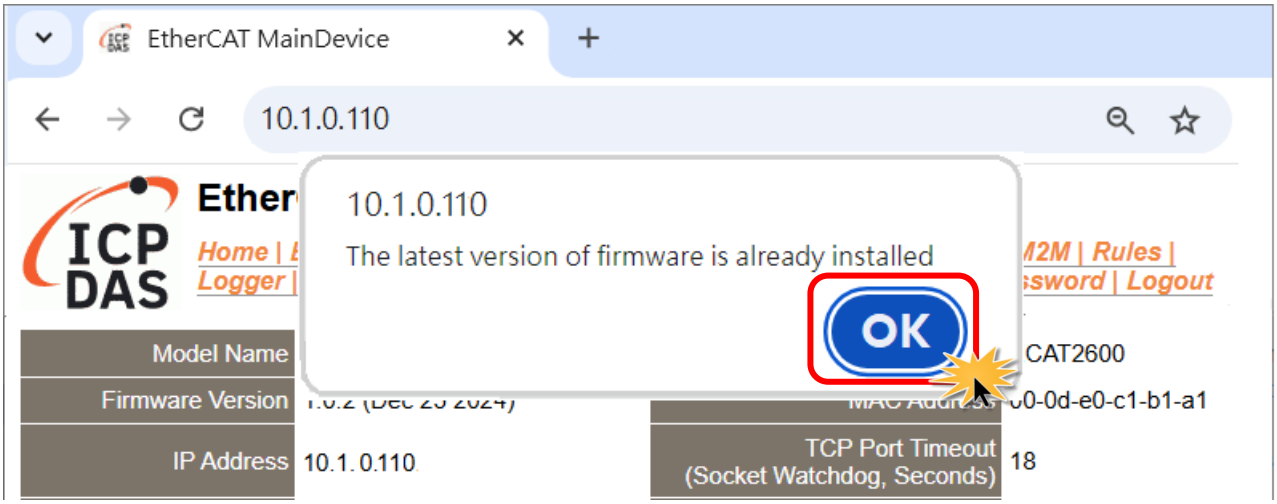
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Step 9: In the Login dialog, enter the username and password, then click the "Sing in" button.

(Use the default username and password is "Admin" for the login)



Step 10: After logging into the ECAT-2601 web server, the main page will be displayed. Check both the Firmware version and Date are correct.



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3. Troubleshooting

3.1 How to update Firmware when the Different Network Segment for IP Address of the ECAT-2601 and Host PC.

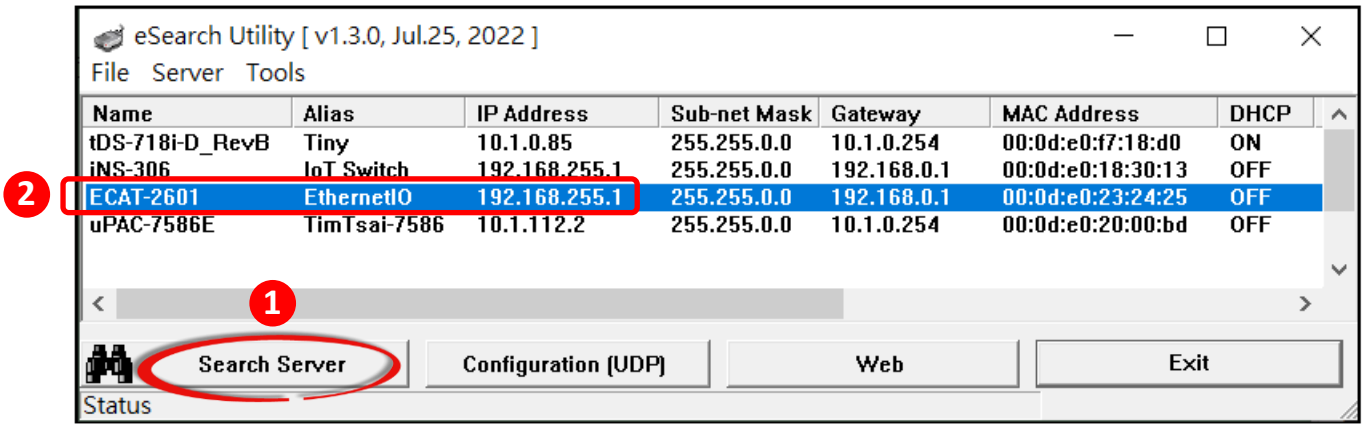
For example, the first time to get the ECAT-2601 series module, the factory default IP address is 192.168.255.1, but the host PC IP address is 10.8.10.8, therefore, before update the firmware, user can refer to the following two methods to update firmware.

Method 1:

Using **"Dynamic Host Configuration Protocol (DHCP)"** to automatically assigns an IP address to ECAT-2601 series module. Follow the procedure described below:

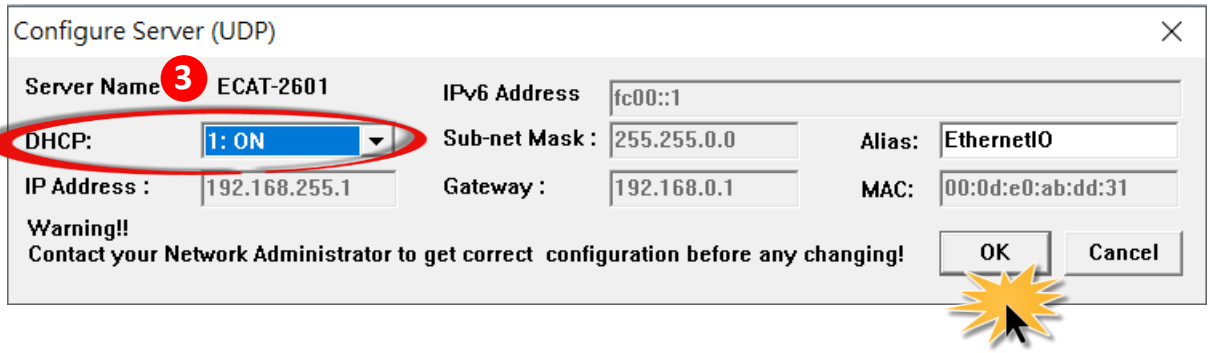
Step 1: Run the eSearch Utility to search for any ECAT-2601 series modules to the network.

Step 2: Double click the name of ECAT-2601 series to open the "Configure Server (UDP)" dialog box.

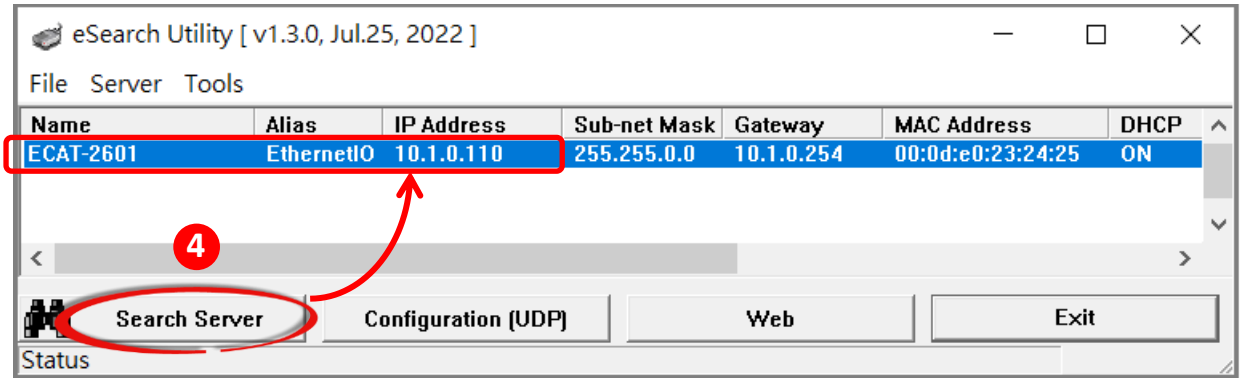


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Step 3: Select the "1: ON" option from the "DHCP:" drop-down menu and click the "OK" button.



Step 4: Wait 2 seconds and then click the "Search Servers" button again to ensure the ECAT-2601 series is working well with new configuration.



Step 5: Refer to "Chapter 2-Firmware Update Procedure" for details of how to complete the update process.

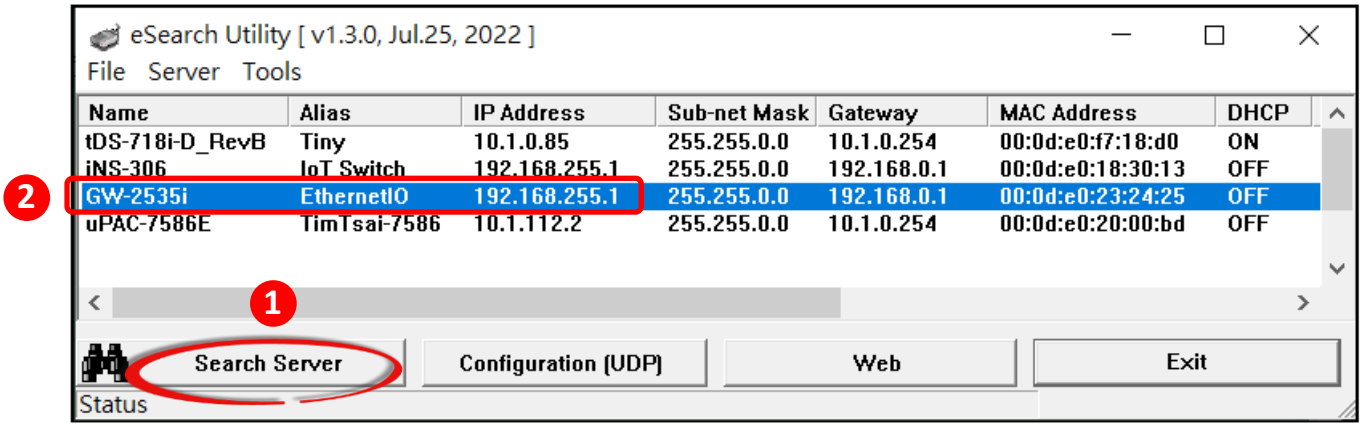
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Method 2

Using **"Manual configuration"** to assigns an IP address to ECAT-2601 series module. Follow the procedure described below:

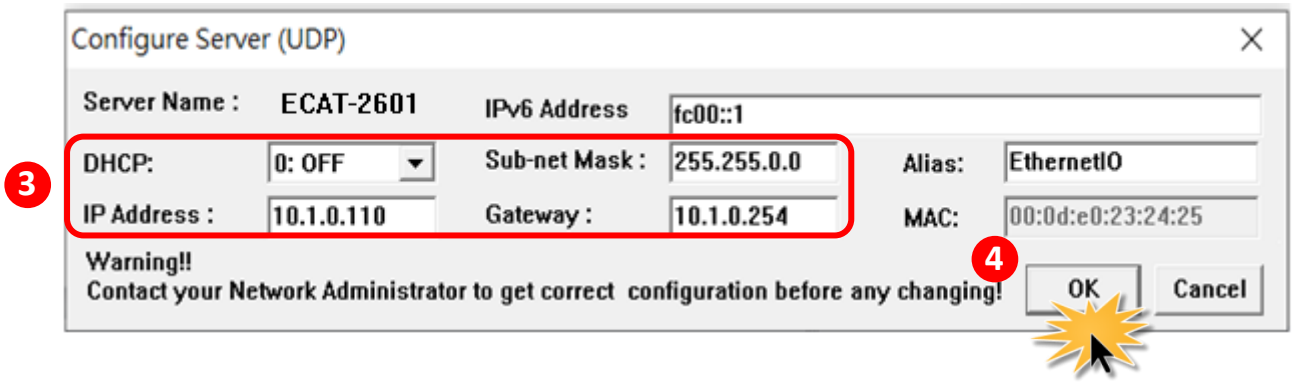
Step 1: Run the eSearch Utility to search for any ECAT-2601 series modules to the network

Step 2: *D*ouble click the name of ECAT-2601 series to open the "Configure Server (UDP)" dialog box.



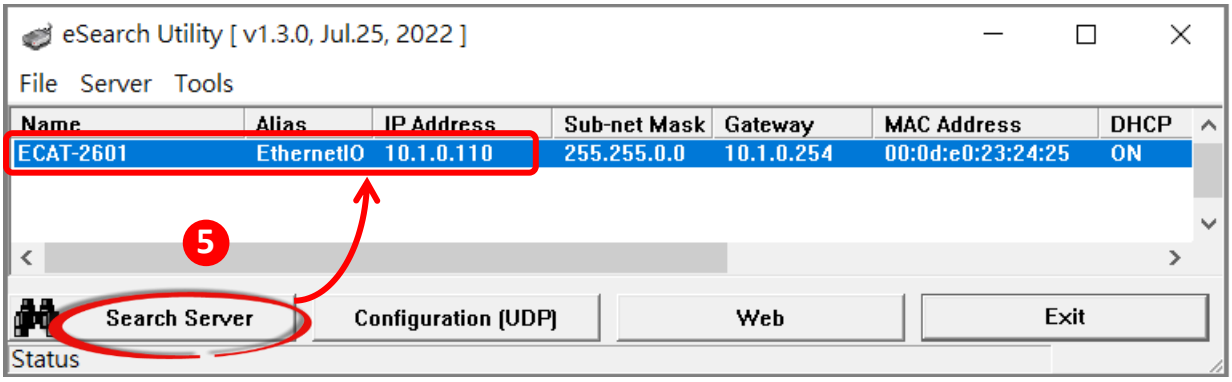
Step 3: Select the "0: OFF" option from the "DHCP:" drop-down menu.

Step 4: Contact your Network Administrator to obtain a correct network configuration (such as IP Address/Sub-net Mask/Gateway). Enter the network settings and click the "OK" button.



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Step 5: Wait 2 seconds and then click the "Search Servers" button again to ensure the ECAT-2601 series is working well with new configuration.



Step 6: Refer to "Chapter 2-Firmware Update Procedure" for details of how to complete the update process.

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3.2 How to update Firmware when the ECAT-2601 fails to recovery/update firmware in a normal way.

Use the following procedure to reset Firmware.



1 Turn off the Power for ECAT-2601.

2 Keep pressing the reset button then turn on power.

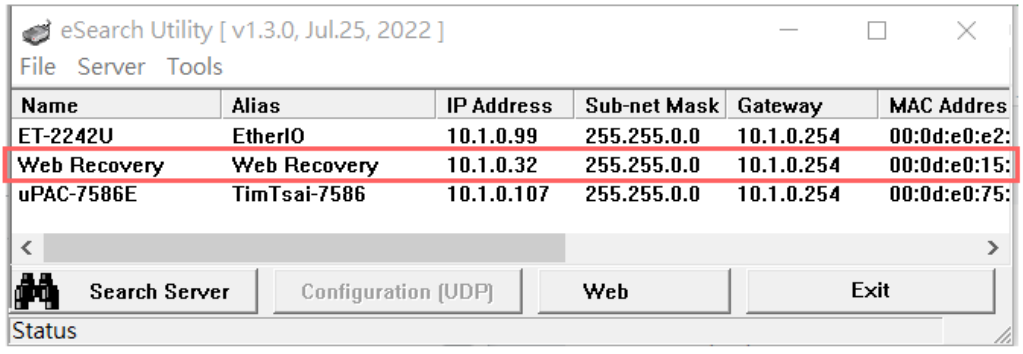
3 Hold the reset button for about 5 seconds, the Sys. LED will light up and blink.

4 Open the eSearch Utility and scan devices, you will see that the name is “Web Recovery” which is ECAT-2601 module.

5 Open the Web browser, enter the IP address of the ECAT-2601 module in the address bar and then click “Enter”, you will see the Recovery menu.

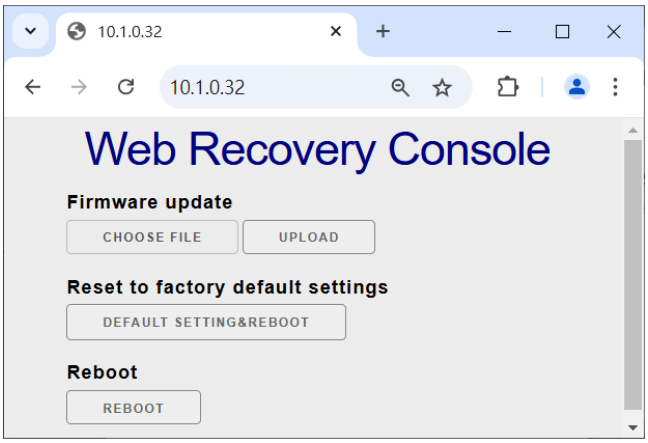


LED Color	LED Behavior
Red	Steady ON
GREEN	Slow flashing – Once about every 1 second
Yellow	To deliver both electrical power and data over a single Ethernet cable

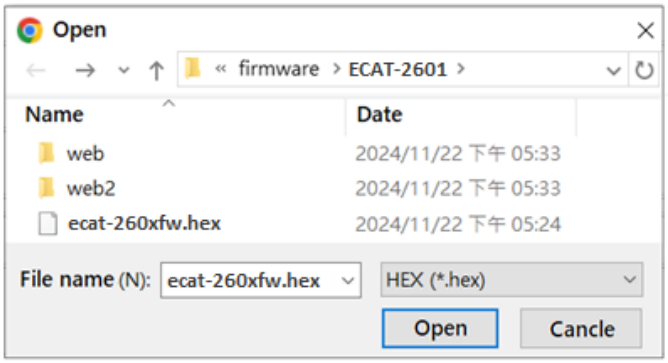


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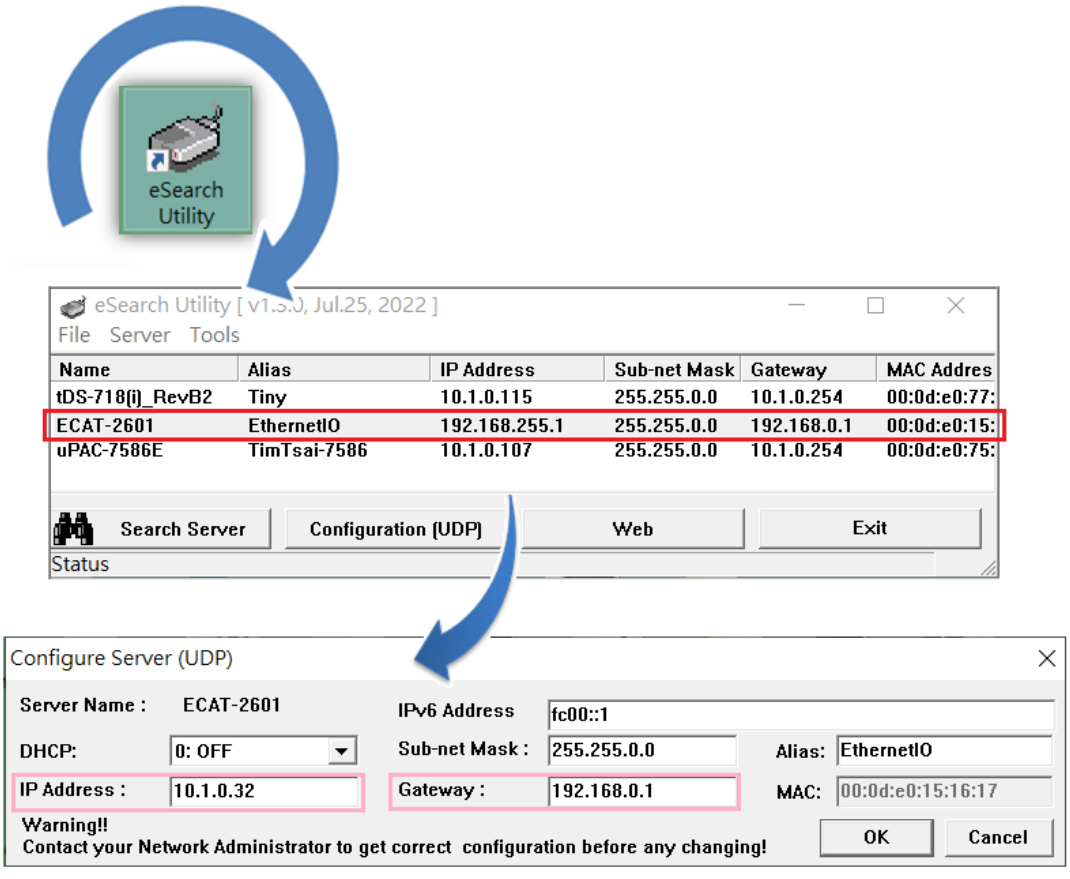
On the “Web Recovery Console” page, user can click “***Firmware update***” or “***Reset to factory default settings***” button to begin the restore process.



Select a firmware image file (ecat-260xfw.hex), and click “***Open***”, follow the step-by-step instructions.



Clicking “***Search Server***” on eSearch Utility again, you will see the module name as a “ECAT-2601”.



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4. Additional Information

The ECAT-2601 series obtains the IP address assigned by the user and retrieves the firmware image through the utility program. Since the flash memory then becomes writable, the firmware can be updated via the Ethernet network.

Notes:

⚠ **Note 1:** If the IP address settings do not work correctly (e.g. there is no response to a ping command), please contact your network administrator to obtain a valid IP address for the ECAT-2601 series module.

⚠ **Note 2:** If the settings displayed in the IP address field of the firmware update window is incorrect or invalid (e.g. IP address: 0.0.0.0), then a valid IP address must be manually specified for the ECAT-2601 series in order to process the update operation.

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