

Packing List

In addition to this guide, the package includes the following item:



ECAT-2601 Module x 1

Resources

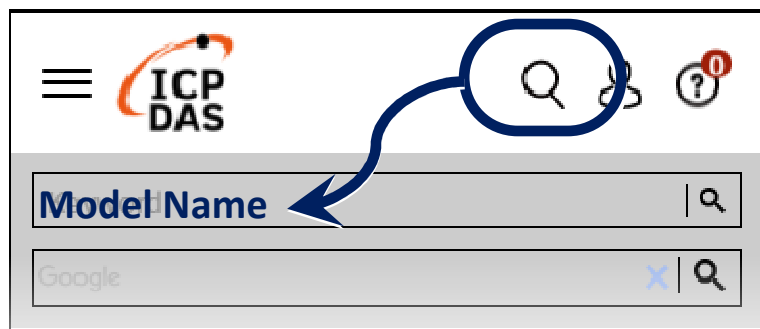
How to search for drivers, manuals and spec information on ICP DAS website.

Technical Support

service@icpdas.com

www.icpdas.com

• For Mobile Web



• For Desktop Web



1 Connecting the Power and Host PC

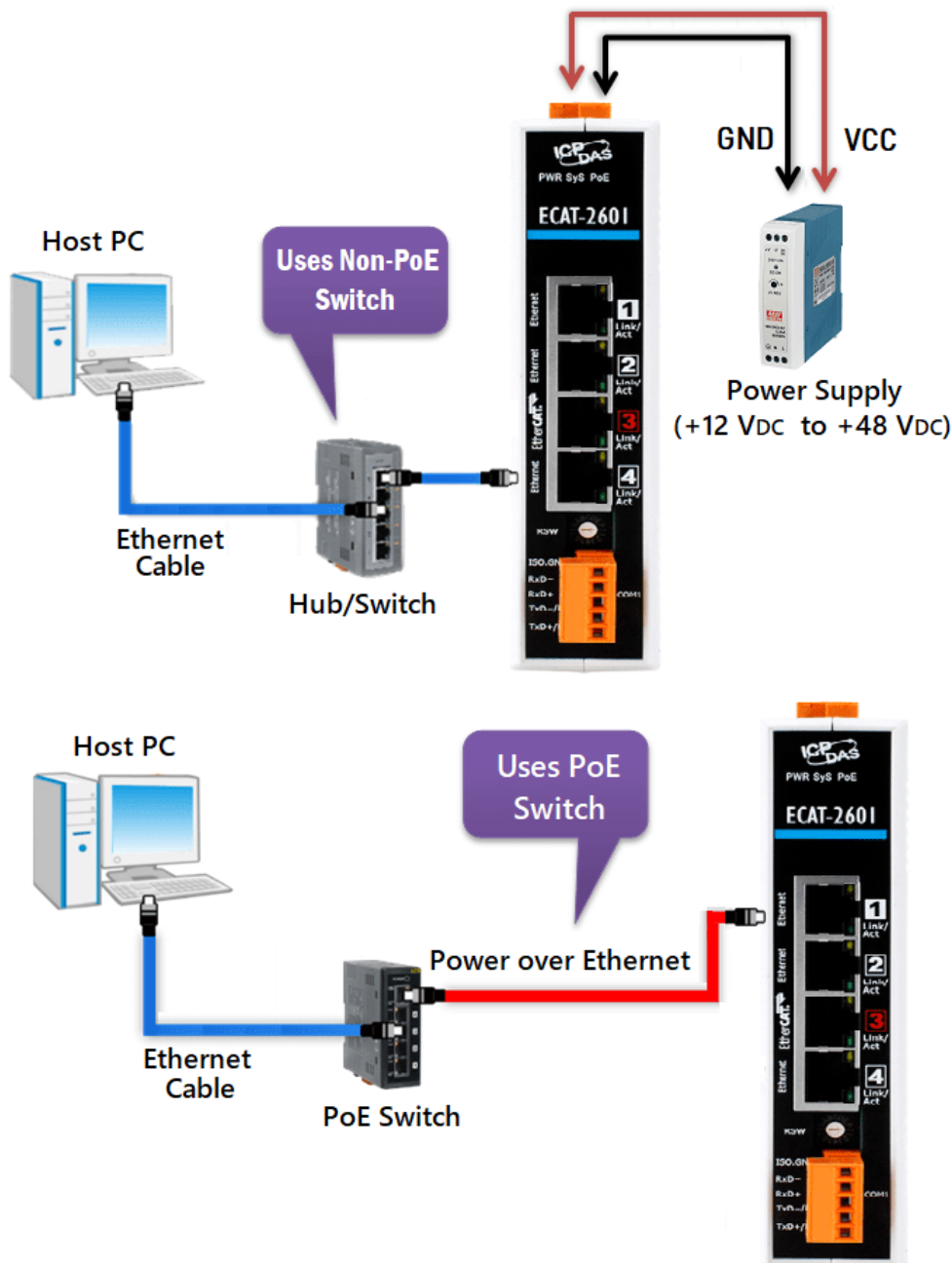
1) Make sure your PC has workable network settings.

Disable or well configure your Windows firewall and Anti-Virus firewall first, else the “Search Servers” on Chapter 5 may not work. (Please contact with your system Administrator)

2) Connect both the ECAT-2601 and your PC to the same sub network or the same Ethernet switch.

3) Supply power (PoE or +12~+48 VDC) to the ECAT-2601.

⚠ Note : Please use the first RJ-45 jack (ETH1) to connect the PoE Switch when using the PoE to power. The others RJ-45 jack doesn't support the PoE function.



2 Installing Software on Your PC

Install eSearch Utility, which can be obtained from the web site:



<https://www.icpdas.com/en/download/index.php?nation=US&kind1=&model=&kw=esearch>



3 Wiring Notes

Wiring Notes for RS-485/422 Interfaces:

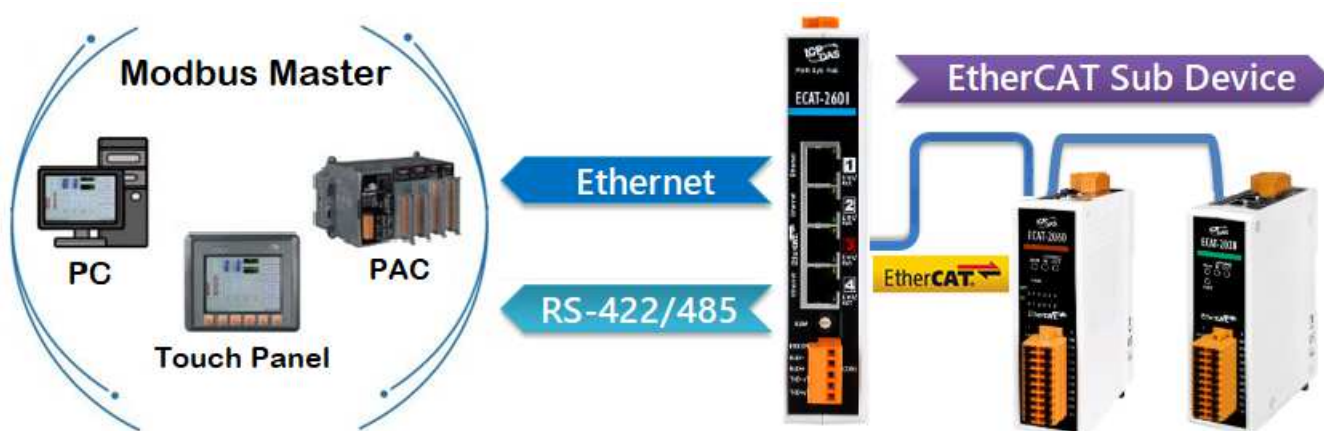
☒ Here, the RS-485 and RS-422 wiring is used as an example.

RS-485 Wiring		RS-422 Wiring	
GW-25xx	RS-485 Modbus Device	GW-25xx	RS-422 Modbus Device
D+	↔	TxD+	→
D-	↔	TxD-	→
GND	—	RxD+	←
		RxD-	←
		GND	—

4 Connecting the Modbus and EtherCAT Devices

- 1) Connect the Modbus Master (e.g., PC, PAC, PLC) via the Ethernet or COM1 port on ECAT-2601 module.
- 2) Connect the EtherCAT device (e.g., ECAT-2060, optional) to the EtherCAT port **(ETH3)** on ECAT-2601 module.
- 3) Supply power (PoE or +12~+48 VDC) to the ECAT-2601.

! Note: The wiring and supply power method depends on your device.



5 Configuring Network Settings

Default Settings of ECAT-2601:

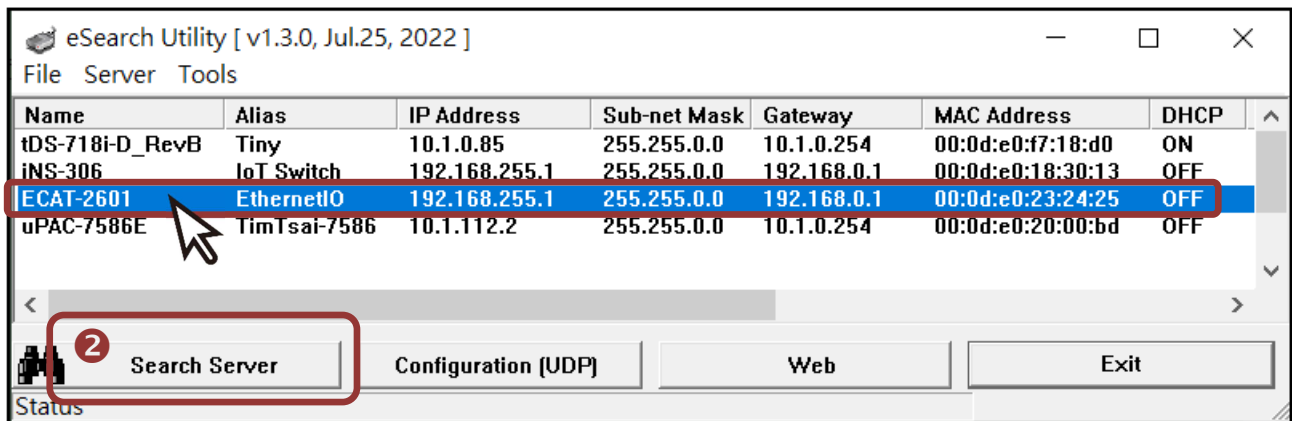
IP Address	Subnet Mask	Gateway	User Name
192.168.255.1	255.255.0.0	192.168.0.1	Admin

- 1) Double-click the eSearch Utility shortcut on the desktop.



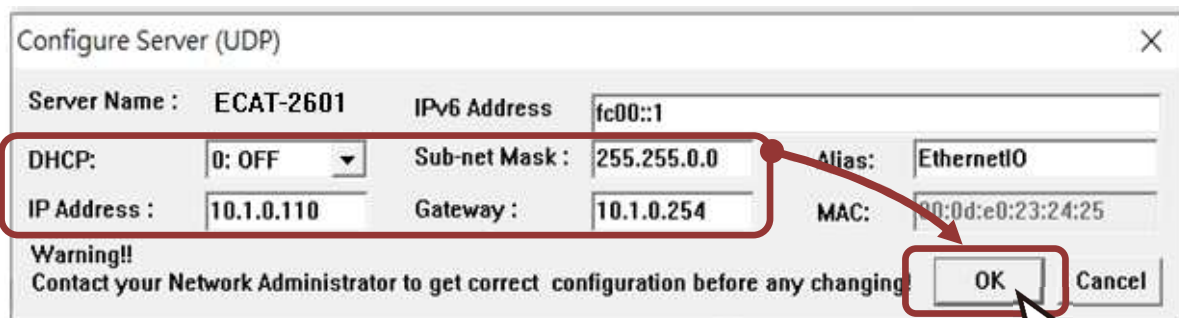
- 2) Click the **“Search Servers”** to search your ECAT-2601.

- 3) Double-click the name of ECAT-2601 to open the **“Configure Server (UDP)”** dialog box.



- 4) Contact your Network Administrator to obtain a correct network configuration (such as **IP/Mask/Gateway**). Enter the **network settings** and click **“OK”**.

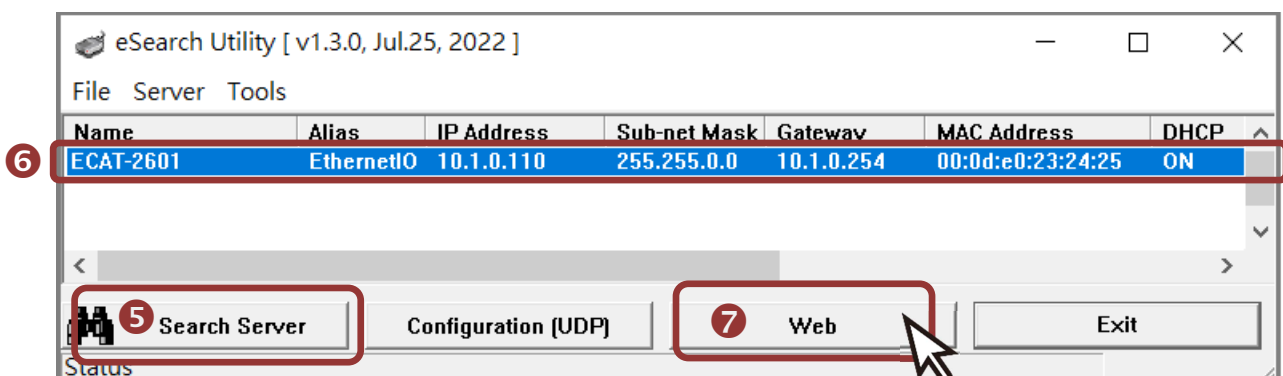
! Note: The ECAT-2601 will use the new settings 2 seconds later.



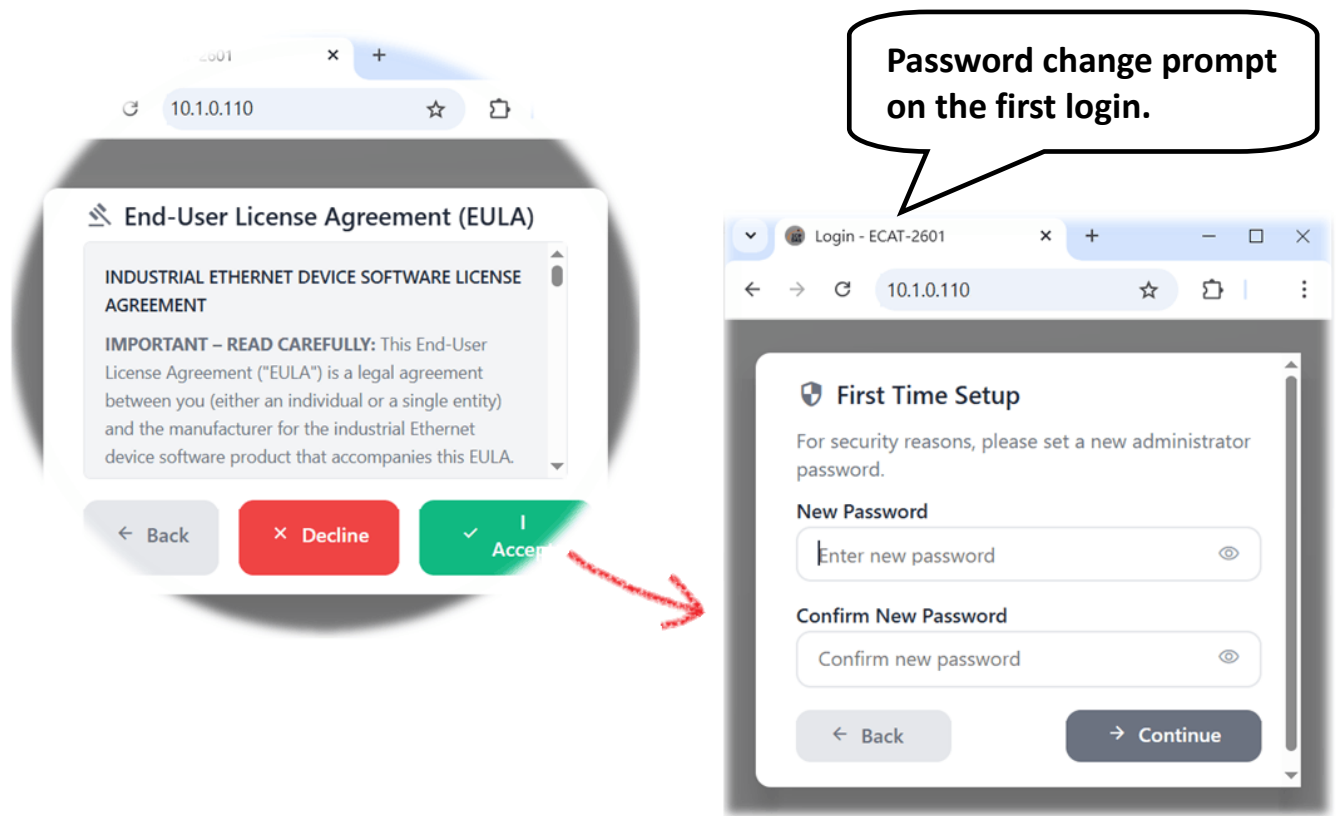
- 5) Wait 2 seconds and click **“Search Servers”** button again to ensure the ECAT-2601 is working well with new configuration.

- 6) Click the name of ECAT-2601 to select it.

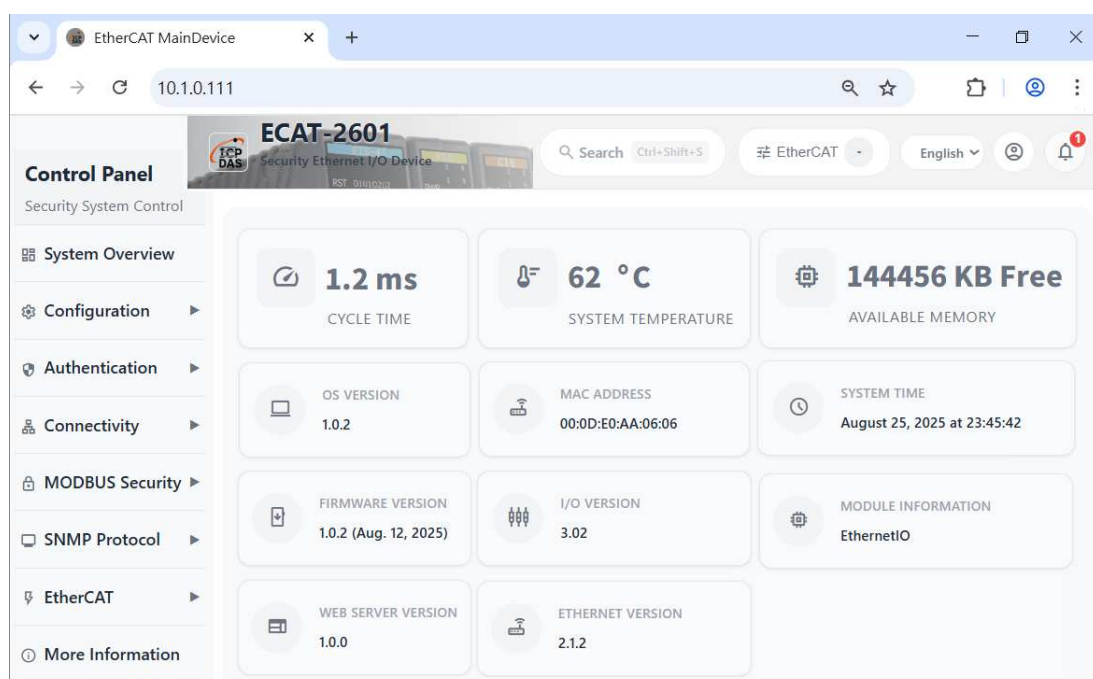
- 7) Click the **“Web”** button to log in to the web configuration pages.
(Or enter the URL address of the ECAT-2601 in the address bar of the browser.)



- 8) When the ECAT-2601 web page appears, a pop-up box containing an **End-User License Agreement (EULA)** will appear. You will need to read this and click "**I Accept**" before you can continue.



- 9) Once you have set the new password in the pop-up box, the user will be able to log in to the ECAT-2601 homepage.



6 Configuring the EtherCAT Port

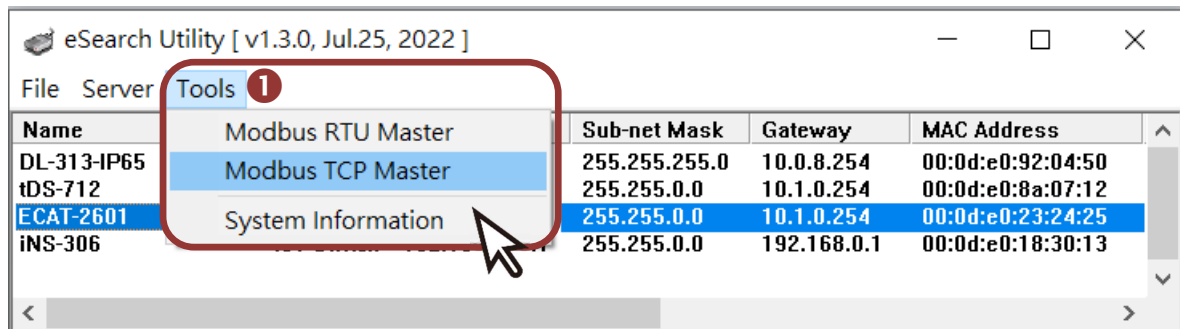
- 1) Click the “EtherCAT” tab to display the “MainDevice Configuration” page.
- 2) Select the “Cycle Time” from the relevant drop down options.
- 3) Click “New” to sartup entry for SDO.
- 4) If the module is connected to an ECAT device, user can also view the status.

The screenshot displays the 'EtherCAT MainDevice' web interface. The left sidebar contains a 'Control Panel' with options: System Overview, Configuration, Authentication, Connectivity, MODBUS Security, SNMP Protocol, EtherCAT, System Status (highlighted with a red box), and More Information. The main content area is titled 'MainDevice Configuration' and includes an 'EtherCAT Mode' section with a dropdown set to 'Energy Saving'. Below this is a table for 'Cycle Time' settings, which is locked. The 'SDO Startup Entry' section features a table with columns: Tag Name, Pos., Index, Subindex, Bit length, Value, CA, and Status. A '+ New' button is present. The 'SubDevice Status' section shows details for 'ECAT-2060 6DI/6Rela...' at 'Pos. 0', including 'ID(DEC) 1', 'SYNCO 0', and status indicators 'OPERATIONAL' and 'FREE RUN'. A yellow arrow points from this section to a detailed view window titled 'ECAT-2060 6DI/6RelayDO - Pos.0'. This window shows 'Digital Inputs 6' and 'Digital Outputs 6' with a table of channel details.

Channel No.	Alias	Status	Action	Modbus Mapping
bitIn0	Digital Inputs	OFF	-	11000
bitIn1	Digital Inputs	OFF	-	11001
bitIn2	Digital Inputs	OFF	-	11002
bitIn3	Digital Inputs	OFF	-	11003
bitIn4	Digital Inputs	OFF	-	11004
bitIn5	Digital Inputs	OFF	-	11005

7 Self-Test

- 1) In the eSearch Utility, select the **“Modbus TCP Master”** item from the **“Tools”** menu to open the Modbus TCP Master Utility.



- 2) In the Modbus TCP Modbus Utility, enter the IP address of ECAT-2601 and click **“Connect”** to connect the ECAT-2601.
- 3) Refer to **“Protocol Description”** section and type the Modbus command in the **“Command”** field then click **“Send command”**.
- 4) If the response data is correct, it means the test is success.

⚠ Note: The Modbus command settings depends on your Modbus device.

