



EasyRemoteIO User Guide

EasyRemoteIO

This guide walks through settings in EasyRemoteIO for configuring Weintek iR-ETN.

UM018004E_20230105

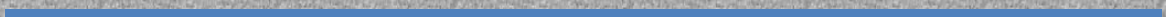


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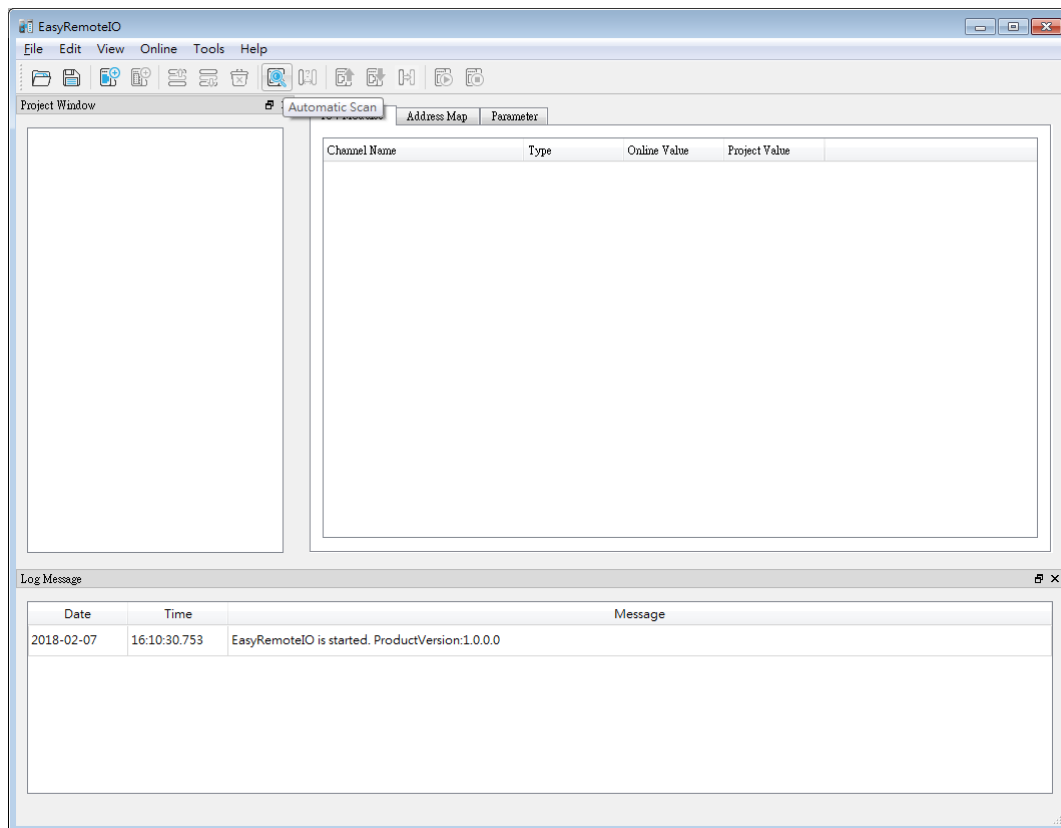
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1. Overview

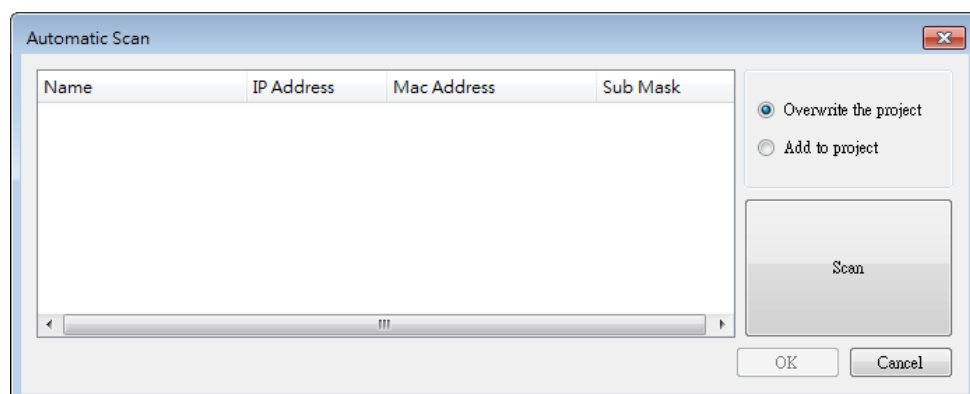
EasyRemotelIO is a tool for users to set up Weintek iR-ETN. In EasyRemotelIO, users can set iR-ETN's IP address, configure parameters, monitor or modify values. In EasyRemotelIO, users who are using EasyBuilder Pro, CODESYS, or EtherNet/IP devices can also export files needed for establishing connection with iR-ETN.

2. Quick Start

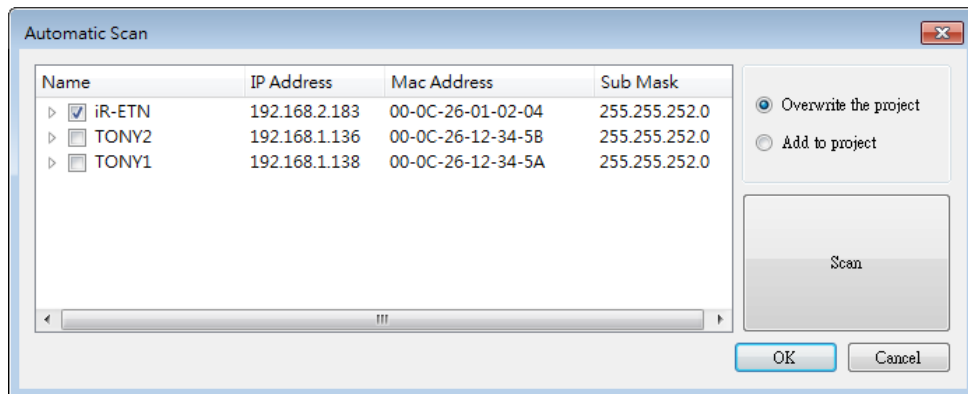
1. Launch EasyRemotelIO, click on [Automatic Scan].



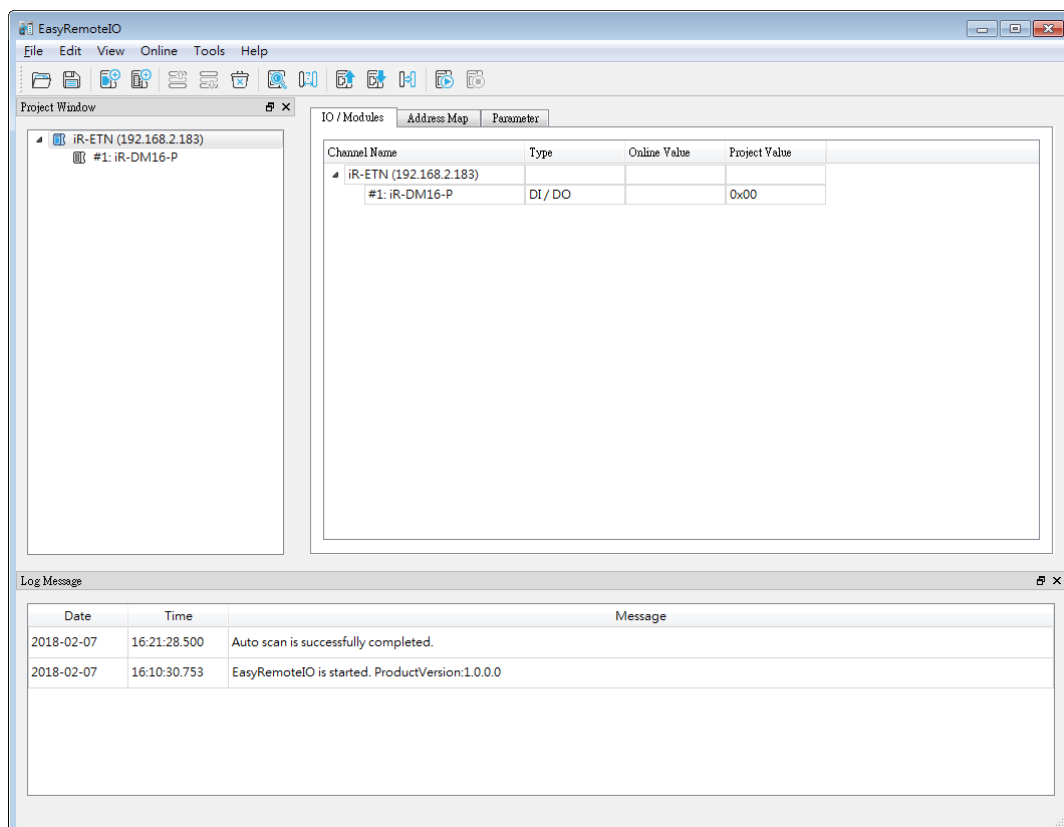
2. Select [Overwrite the project], and click [Scan]. The default IP of iR-ETN is 192.168.0.212. Please make sure the PC is in the same domain: 192.168.0.*.*.



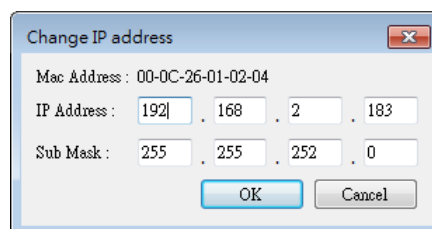
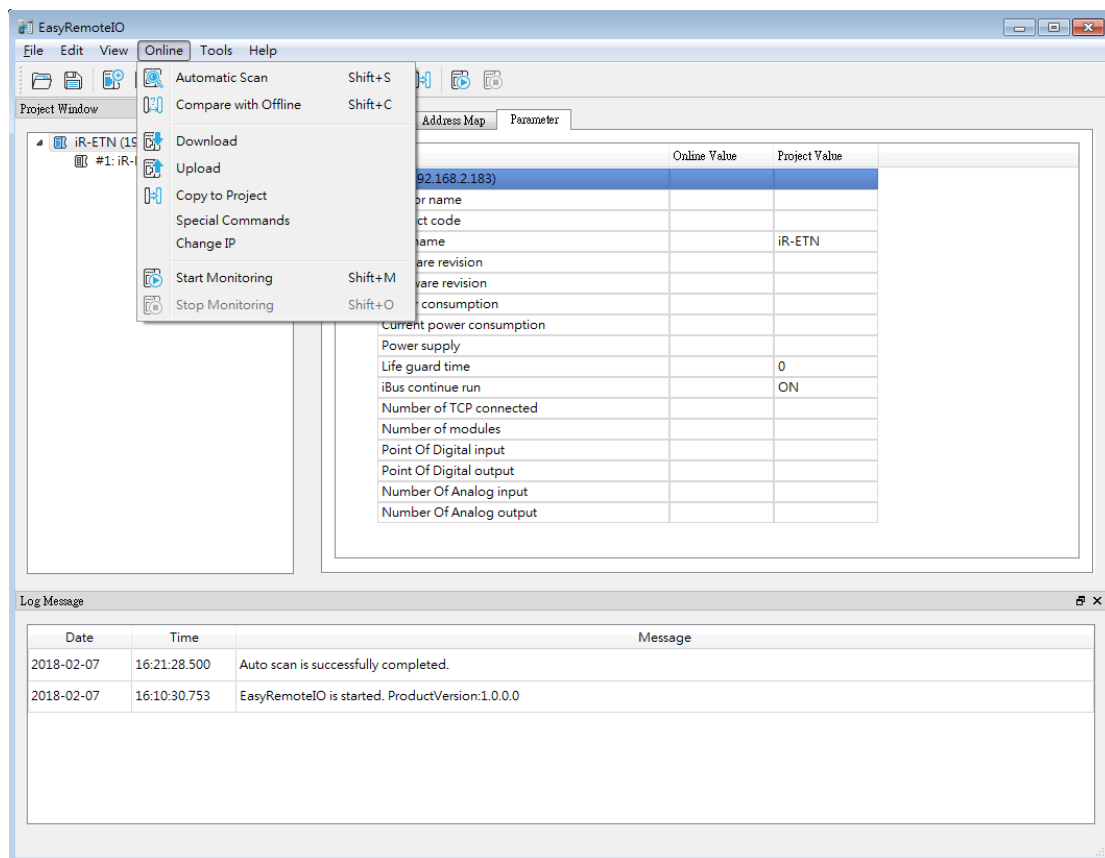
3. The iR-ETN can be found in Automatic Scan window. Select the iR-ETN you want to modify and click OK.



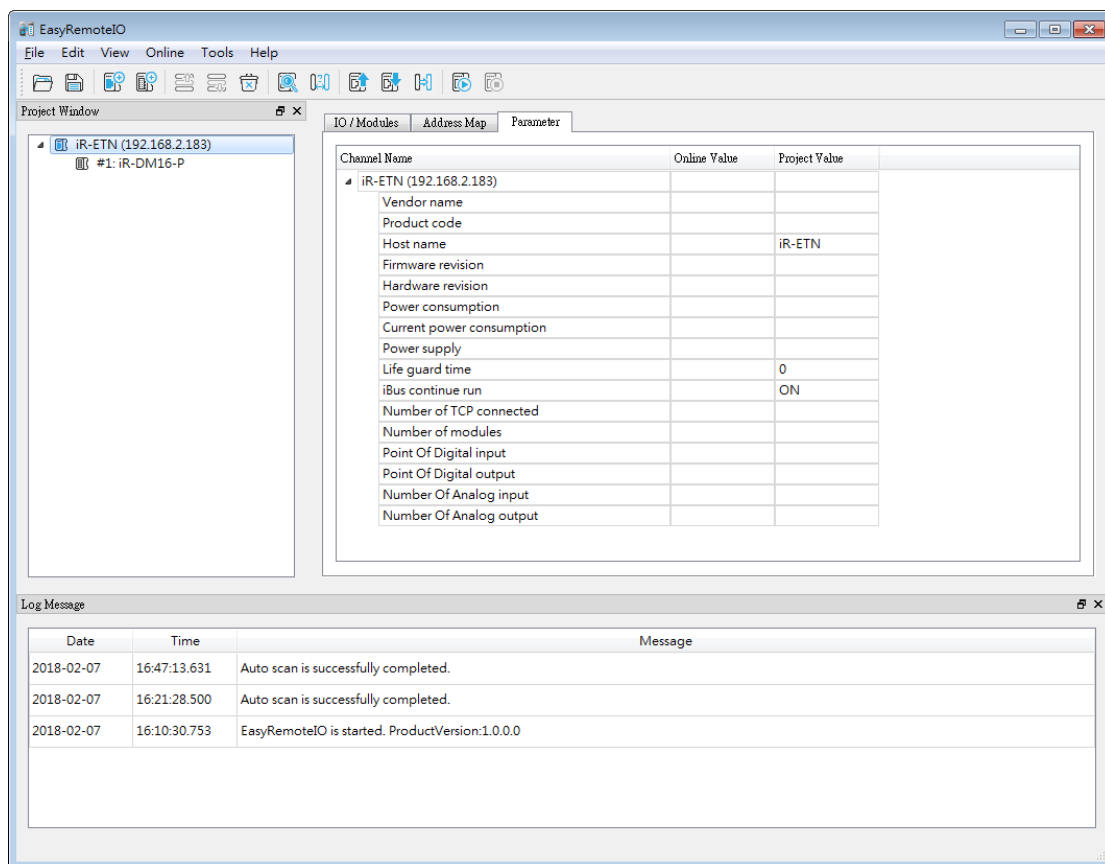
4. The iR-ETN and the module's information will be shown as below.



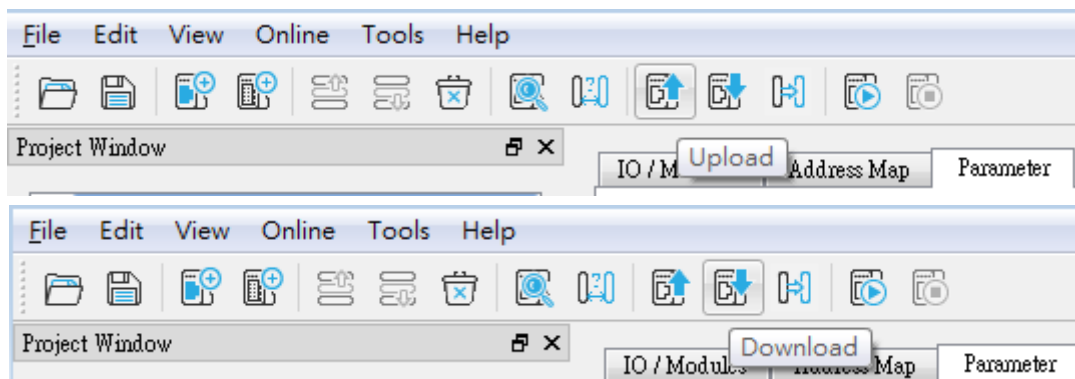
5. Select [Change IP] in [Online] to change the IP address of iR-ETN and then click OK.



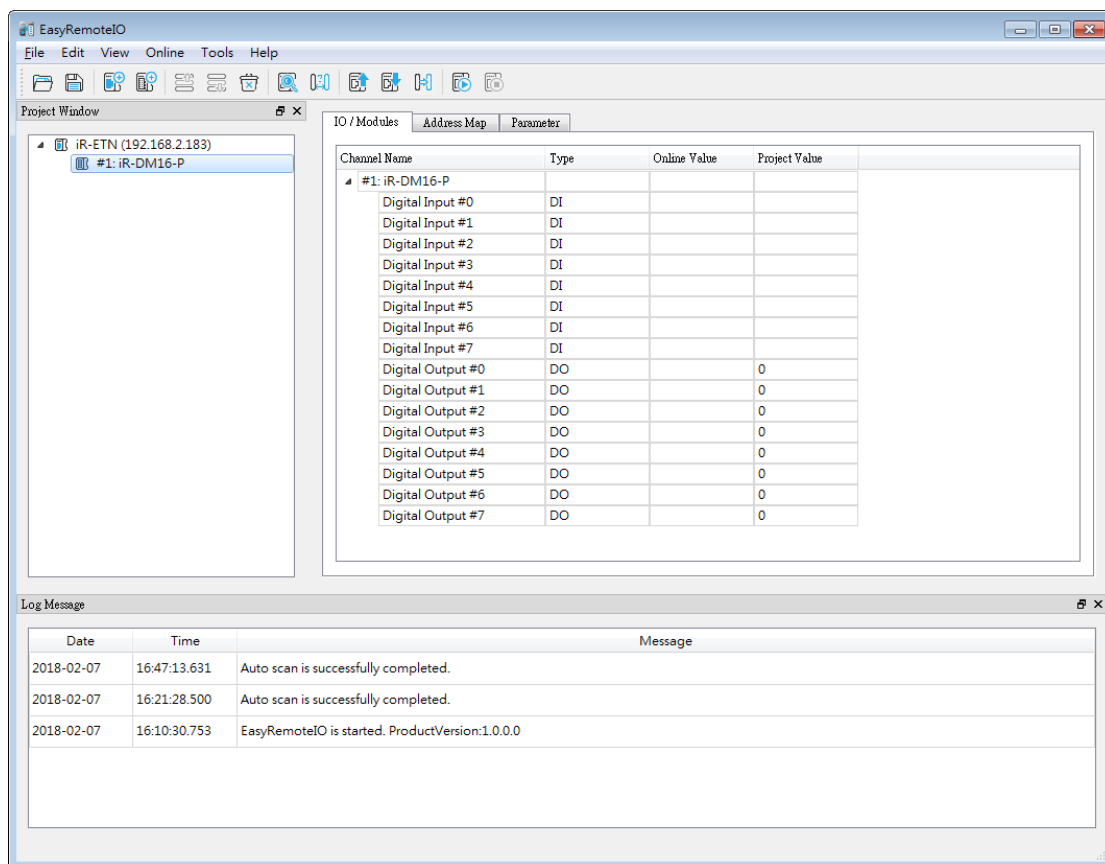
6. In the Project Window, select iR-ETN and then go to [Parameter] tab in the right column. Here you can change the related parameters of iR-ETN. The actual value of iR-ETN is in the [Online Value] column. The new value should be entered in the [Project Value] column.



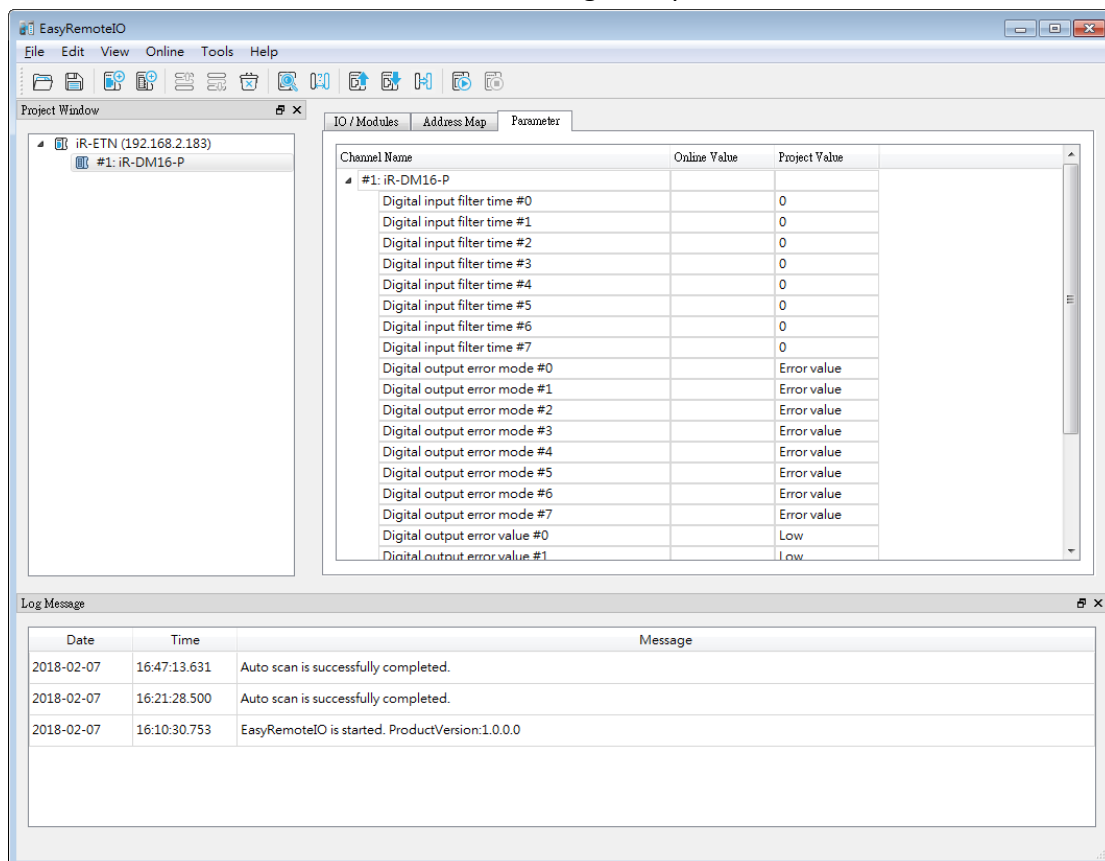
7. Click [Upload] to read the data from iR-ETN and show in EasyRemotelIO.
Click [Download] to write the data in EasyRemotelIO to iR-ETN.



8. Select iR-ETN's module in Project Window. In the IO/Modules tab you can read/write inputs and outputs value. Click [Download] to write the data from EasyRemotelIO to iR-ETN.



9. The Parameter tab allows users to change the parameters of the modules.



3. Settings

Edit

Add

Network Coupler: Add network coupler manually.

Module: Add module manually.

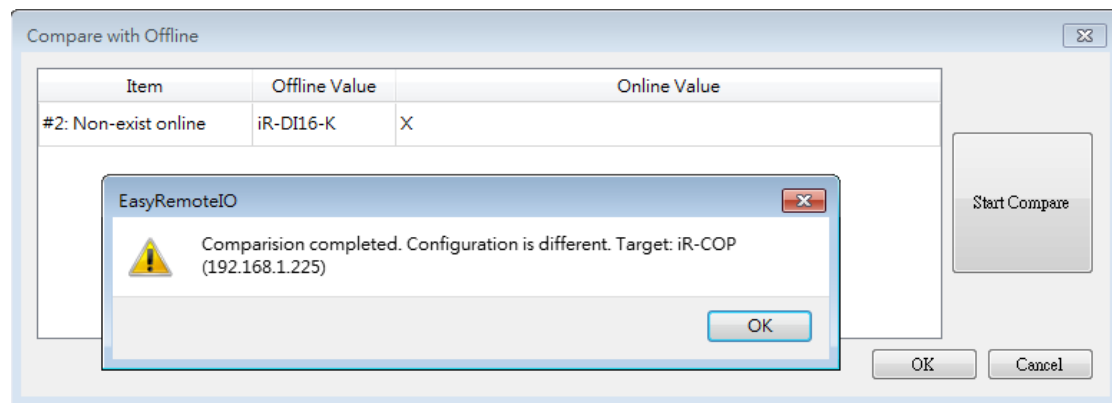
Online

Automatic Scan

Scan all the iR-ETN in the same domain.

Compare with Offline

Check whether the devices in EasyRemoteIO exist in the same domain.



Download

Write the value from EasyRemoteIO's Project Value column to the iR-ETN.

Upload

Read the value from iR-ETN and show in EasyRemoteIO's Online Value column.

Copy to project

Read the value from iR-ETN and show in EasyRemoteIO's Online Value and Project Value columns.

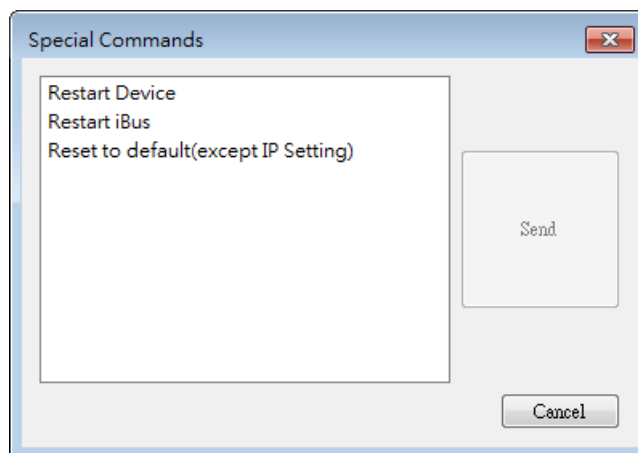
IO / Modules				
Address Map		Parameter		
Channel Name	Type	Online Value	Project Value	
#1: iR-DM16-P				
Digital Input #0	DI	0		
Digital Input #1	DI	0		
Digital Input #2	DI	0		
Digital Input #3	DI	0		
Digital Input #4	DI	0		
Digital Input #5	DI	0		
Digital Input #6	DI	0		
Digital Input #7	DI	0		
Digital Output #0	DO	0	0	
Digital Output #1	DO	0	0	
Digital Output #2	DO	0	0	
Digital Output #3	DO	0	0	
Digital Output #4	DO	1	1	
Digital Output #5	DO	0	0	
Digital Output #6	DO	0	0	
Digital Output #7	DO	0	0	

Special Commands

Restart Device: Restart iBus and module.

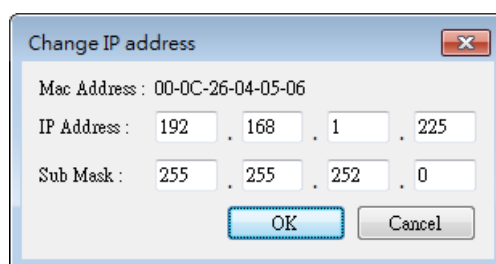
Restart iBus: Restart iBus only.

Reset to default (except IP setting): Reset all the parameters, except IP settings, to default.



Change IP

Change the IP address of iR-ETN.



Start Monitoring

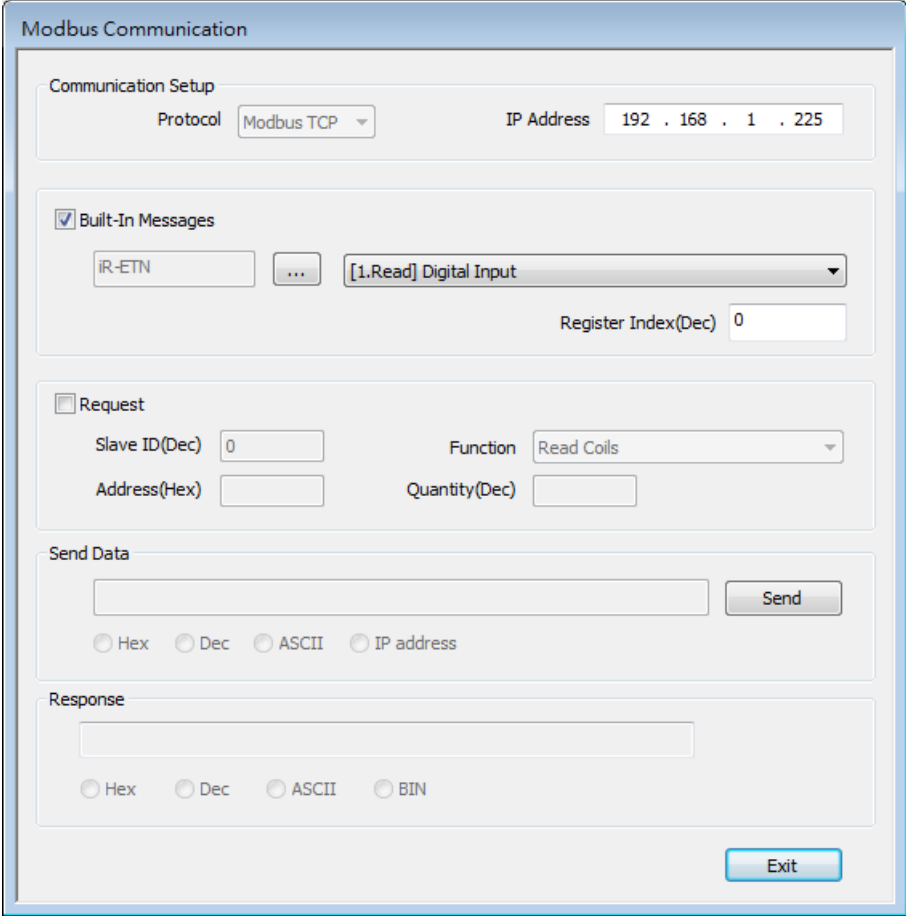
Start monitoring iR-ETN. (Read only)

Stop Monitoring

Stop monitoring iR-ETN.

Tools**Modbus**

Allows users to run an online MODBUS TCP/IP client on the PC.



The image shows a screenshot of the 'Modbus Communication' dialog box. It is divided into several sections: 'Communication Setup' with a 'Protocol' dropdown set to 'Modbus TCP' and an 'IP Address' field containing '192 . 168 . 1 . 225'; 'Built-In Messages' with a checked checkbox, a button with three dots, a dropdown menu showing '[1.Read] Digital Input', and a 'Register Index(Dec)' field with '0'; 'Request' with a checked checkbox, 'Slave ID(Dec)' field with '0', 'Address(Hex)' field, 'Function' dropdown set to 'Read Coils', and 'Quantity(Dec)' field; 'Send Data' with a text input field, a 'Send' button, and radio buttons for 'Hex', 'Dec', 'ASCII', and 'IP address'; and 'Response' with a text input field and radio buttons for 'Hex', 'Dec', 'ASCII', and 'BIN'. An 'Exit' button is located at the bottom right.

4. Analog Module

Displaying Channel Value

All channel values are displayed when clicking the [Start Monitoring] button in the IO/Modules tab.

IO / Modules			
Address Map		Parameter	
Channel Name	Type	Online Value	Project Value
▼ #3: iR-AI04-VI			
Analog Input #0	AI	0	
Analog Input #1	AI	0	
Analog Input #2	AI	0	
Analog Input #3	AI	0	

Writing Channel Value

All channel values are displayed when clicking the [Start Monitoring] button in the IO/Modules tab.

Specify [Project Value] and then click [Download], the specified value will be written into [Online Value].

IO / Modules			
Address Map		Parameter	
Channel Name	Type	Online Value	Project Value
▼ #2: iR-AQ04-VI			
Analog Output #0	AO	10000	10000
Analog Output #1	AO	0	0
Analog Output #2	AO	0	0
Analog Output #3	AO	0	0

Configuring Parameters

Click [Upload All] to read all parameters which are displayed in the Parameter tab.

IO / Modules			
Address Map		Parameter	
Channel Name	Online Value	Project Value	
▼ #3: iR-AI04-VI			
Product Code	0x0425		
Firmware Revision	1.0.0.0		
Hardware Revision	1.0.0.0		
Power Consumption	0.35 W		
Point of Digital Input	0		
Point of Digital Output	0		
Number of Analog Input	4		
Number of Analog Output	0		
Input Mode #0	Close	Close	
Input Mode #1	Close	Close	
Input Mode #2	Close	Close	
Input Mode #3	Close	Close	
Input Scale Range Upper Limit #0	32000	32000	
Input Scale Range Upper Limit #1	32000	32000	

Revise channel parameter under [Project Value].

IO / Modules Address Map Parameter		
Channel Name	Online Value	Project Value
▼ #3: iR-AI04-VI		
Product Code	0x0425	
Firmware Revision	1.0.0.0	
Hardware Revision	1.0.0.0	
Power Consumption	0.35 W	
Point of Digital Input	0	
Point of Digital Output	0	
Number of Analog Input	4	
Number of Analog Output	0	
Input Mode #0	Close	±10V
Input Mode #1	Close	Close
Input Mode #2	Close	Close
Input Mode #3	Close	Close
Input Scale Range Upper Limit #0	32000	32000
Input Scale Range Upper Limit #1	32000	32000

Click [Download] to write from [Project Value] into [Online Value].

IO / Modules Address Map Parameter		
Channel Name	Online Value	Project Value
▼ #3: iR-AI04-VI		
Product Code	0x0425	
Firmware Revision	1.0.0.0	
Hardware Revision	1.0.0.0	
Power Consumption	0.35 W	
Point of Digital Input	0	
Point of Digital Output	0	
Number of Analog Input	4	
Number of Analog Output	0	
Input Mode #0	±10V	±10V
Input Mode #1	Close	Close
Input Mode #2	Close	Close
Input Mode #3	Close	Close
Input Scale Range Upper Limit #0	32000	32000
Input Scale Range Upper Limit #1	32000	32000

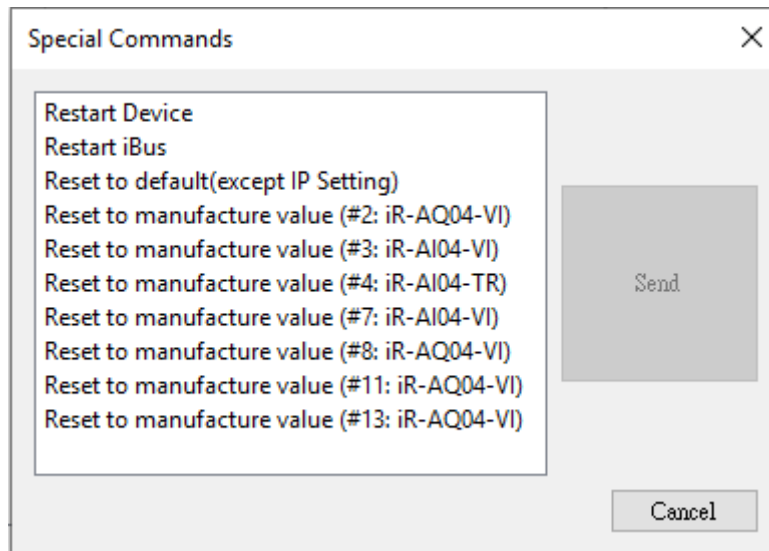
※For more information about channel parameters, please see chapter 6 in UM018013E_iR-Axxx-VI_UserManual_20190401_eng

※Settings in the Parameter tab are written into the analog module's registers.
A faster way to start analog module is to configure the parameters using EasyRemoteIO and then import the settings on the coupler.

Initializing Module

[Online] » [Special Commands]

Select the analog modules to be initialized, and then click [Send] to restore factory default.

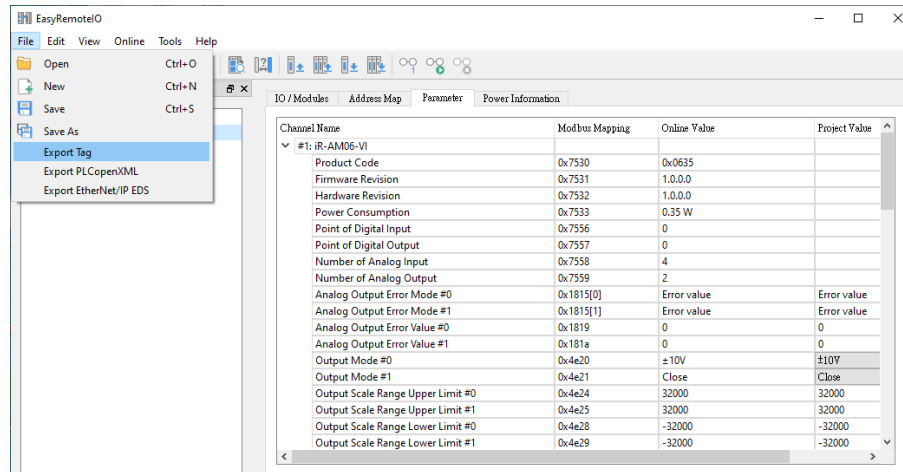


5. Export

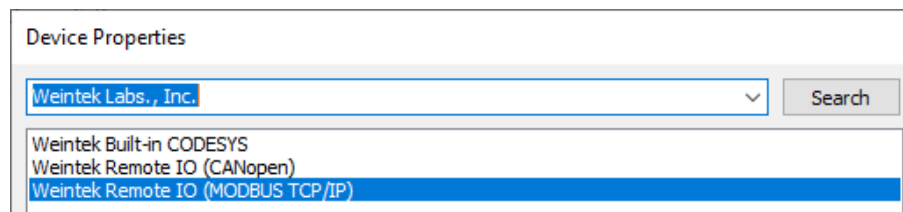
Export Tag

When Weintek Remote IO (MODBUS TCP/IP) driver is selected in EasyBuilder Pro, selecting [Export Tag] in EasyRemoteIO can help users quickly build iR-ETN related parameters.

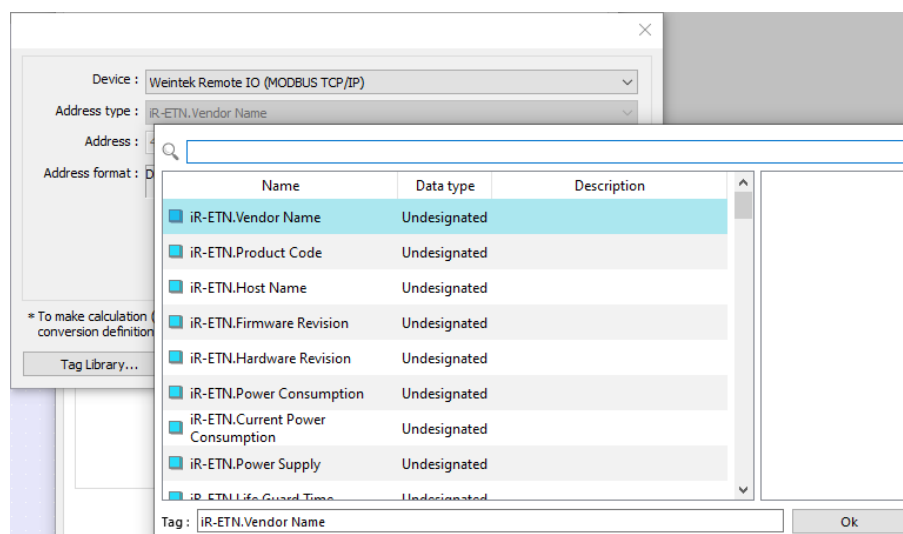
1. Launch EasyRemoteIO and select [File] » [Export Tag].



2. Launch EasyBuilder Pro and select [System Parameters] » [New Device] » [Weintek Remote IO(MODBUS TCP/IP)].



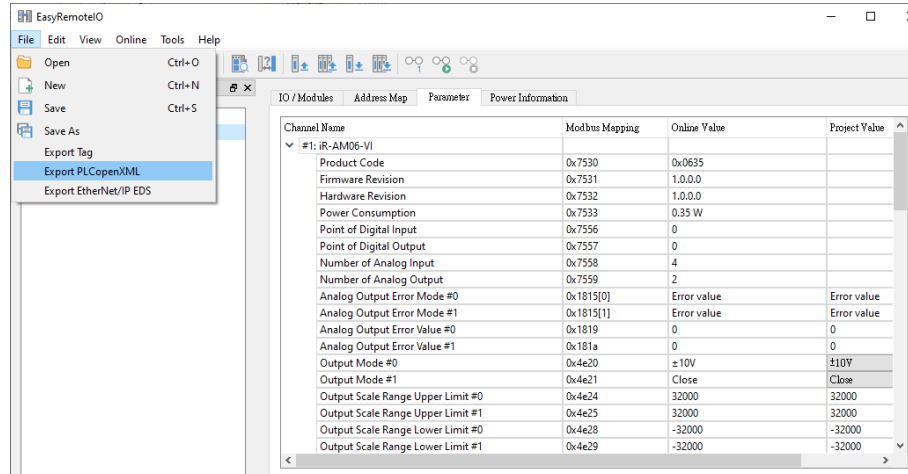
3. After importing tags, information about iR-ETN can be found when creating an object.



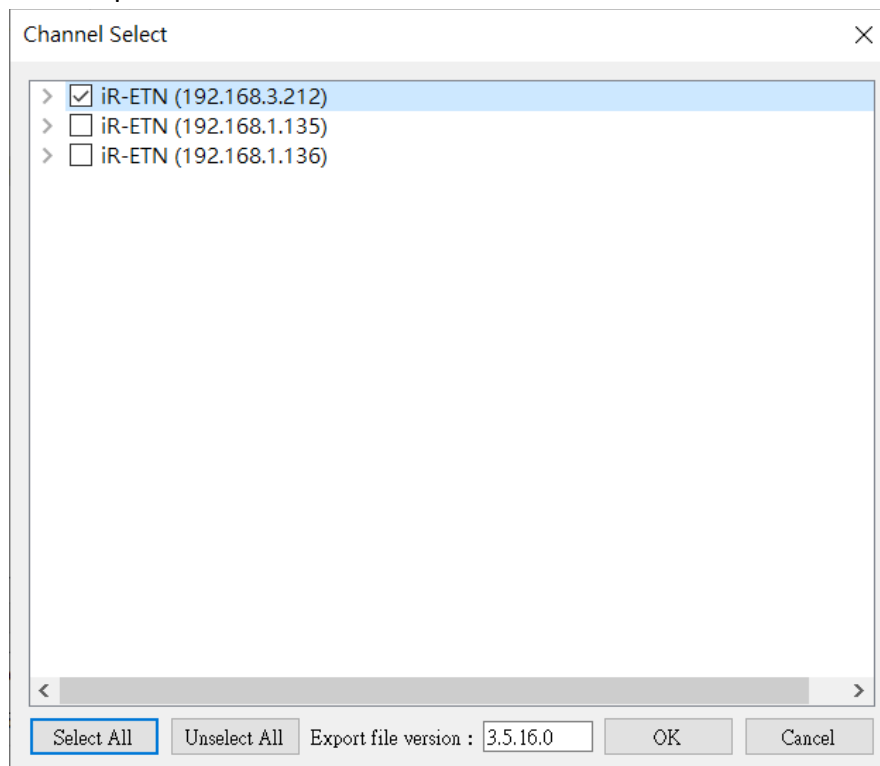
Export PLCopenXML

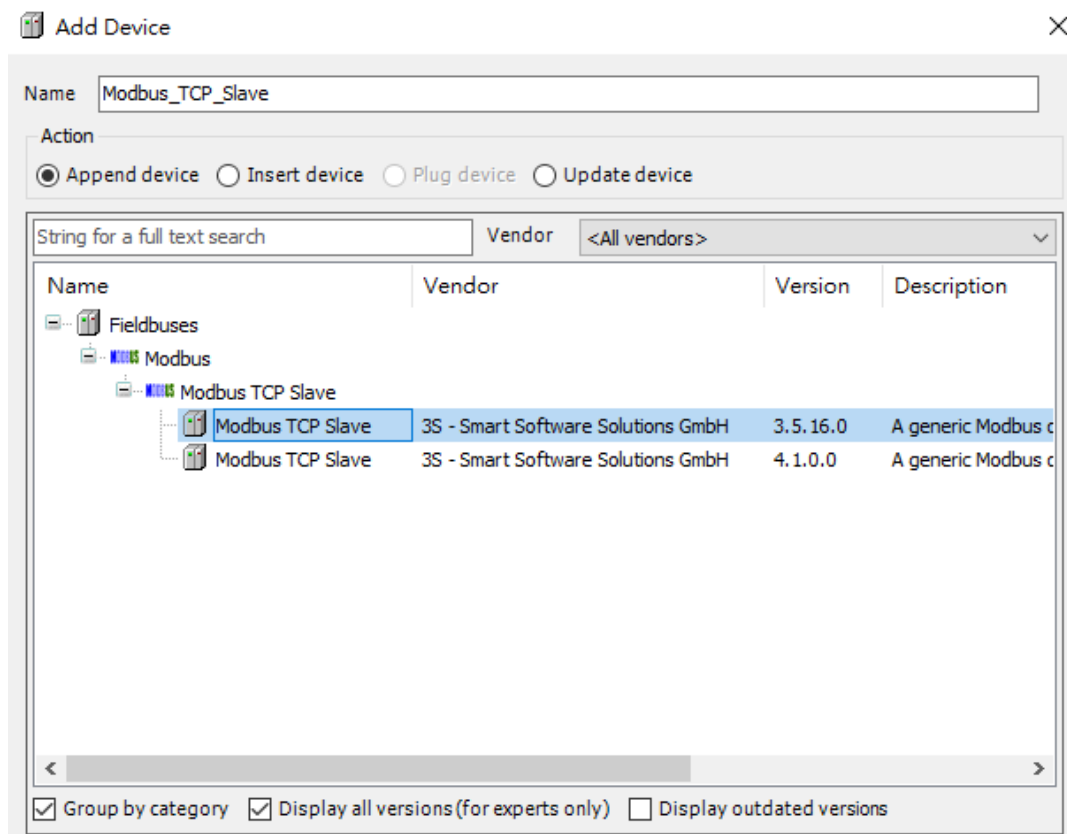
Exporting PLCopenXML file can help users quickly build communication parameters when establishing connection between a CODESYS device and an iR-ETN.

1. Launch EasyRemoteIO and select [File] » [Export PLCopenXML].

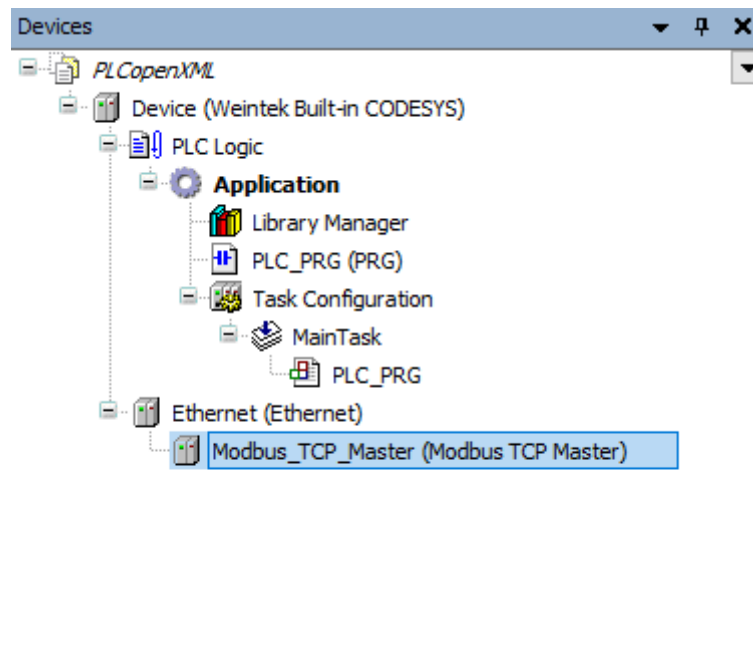


2. Select the device and set the file version to be exported. The file version should be the same as that of the Modbus_TCP_Slave in CODESYS IDE. The version used in the example below is 3.5.16.0.

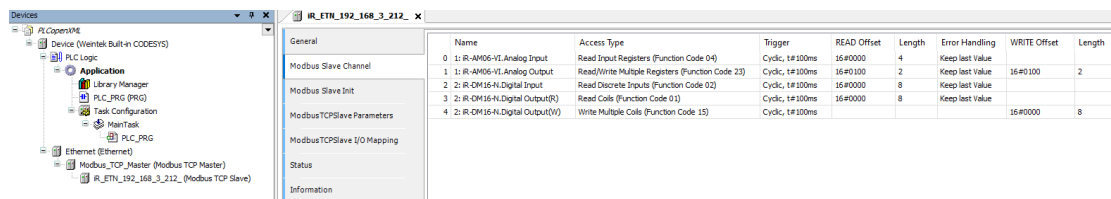




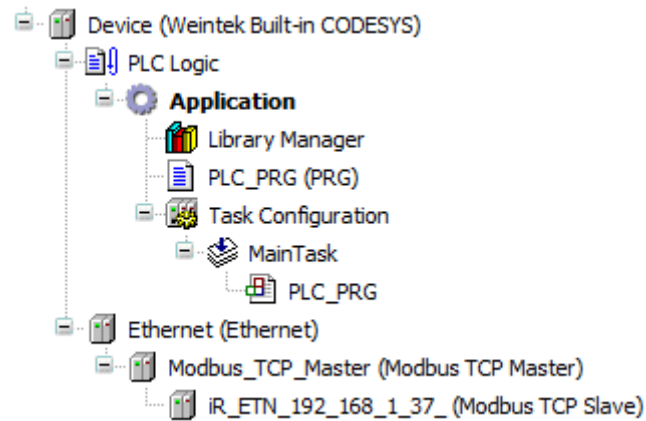
3. Launch CODESYS, add [Ethernet] » [Modbus_TCP_Master] device.



4. Import PLCOpenXML by selecting [Project] » [Import PLCOpenXML].



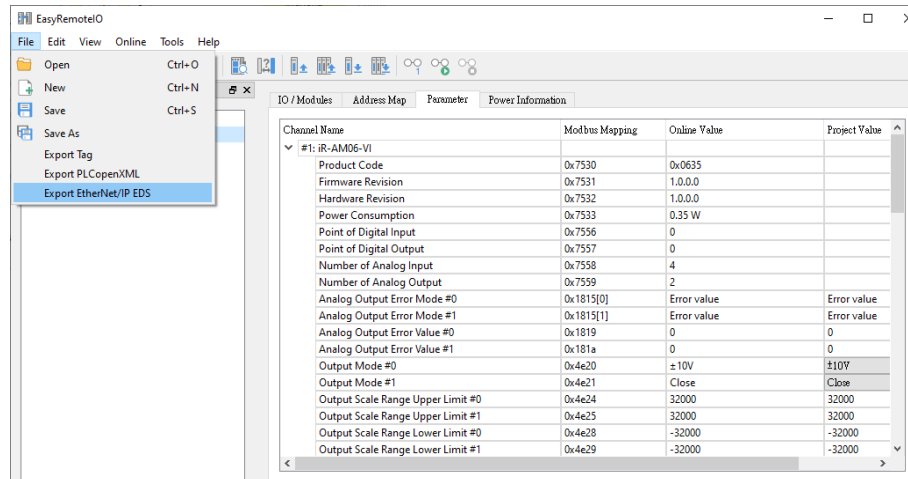
5. After importing the file, the selected iR-ETN can be found in the CODESYS project with the read/write channels and parameters set.



Export EtherNet/IP EDS

Exporting EtherNet/IP EDS file can generate Electronic Data Sheets of iR-ETN.

1. Launch EasyRemoteIO and select [File] » [Export EtherNet/IP EDS].



2. Import EtherNet/IP EDS in the user interface of EtherNet/IP device. Please see [iR-ETN EtherNet/IP Connection Guide](#) for more information.