

EasyRemoteIO User Guide

## *EasyRemoteIO*

This guide walks through settings in EasyRemoteIO for configuring Weintek iR-ETN/iR-ETN40R.

UM018004E\_20230822



## Table of Contents

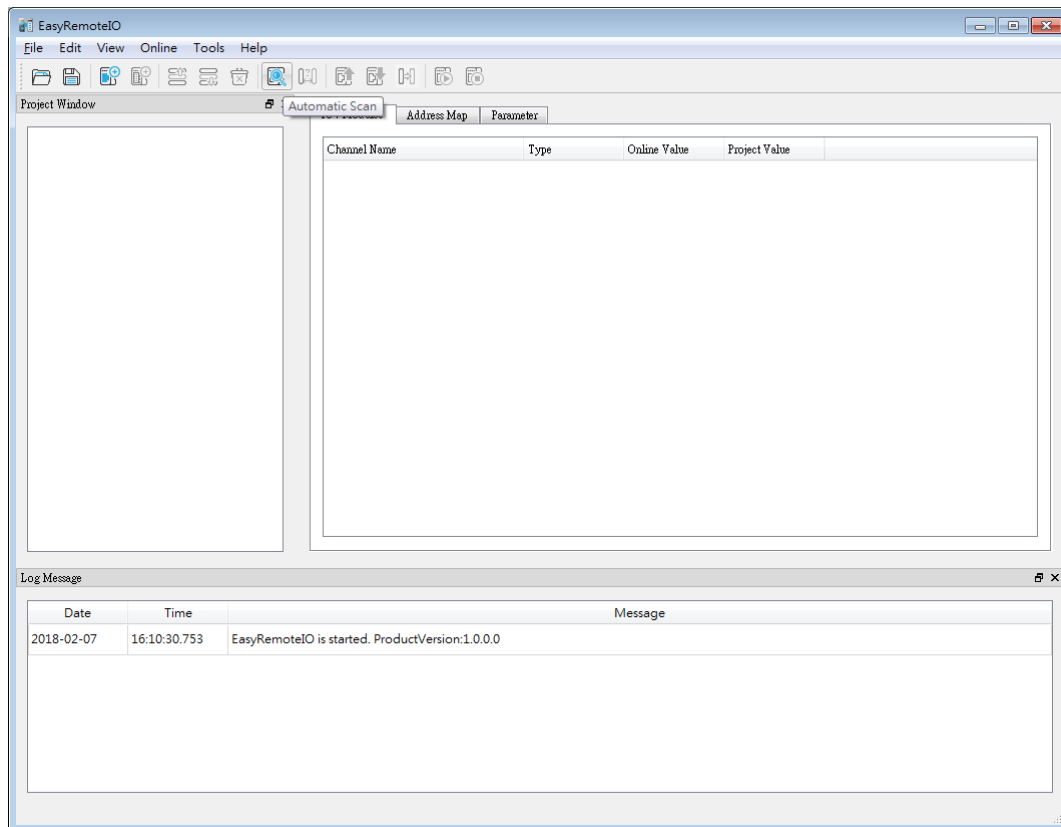
1. Overview .....	1
2. Quick Start .....	1
3. Settings .....	7
Edit .....	7
Online.....	7
Tools .....	9
4. Analog Module .....	10
Displaying Channel Value .....	10
Writing Channel Value .....	10
Configuring Parameters .....	10
Initializing Module .....	12
5. Export.....	13
Export Tag .....	13
Export PLCopenXML.....	14
Export EtherNet/IP EDS.....	16

## 1. Overview

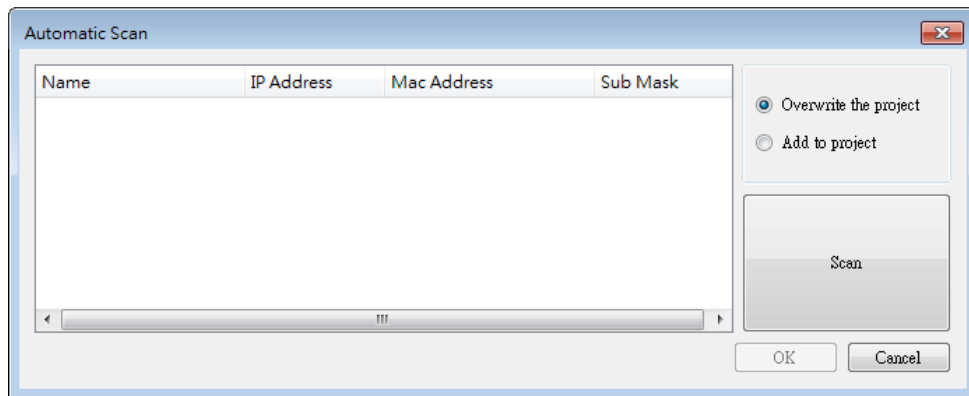
EasyRemotelIO is a tool designed for configuring Weintek iR-ETN/iR-ETN40R devices. Through the EasyRemotelIO interface, users have the capability to configure iR-ETN/iR-ETN40R's IP address and various parameters, and monitor or modify device values. Additionally, the export feature of EasyRemotelIO facilitate users, especially those using EasyBuilder Pro, CODESYS, or EtherNet/IP devices, in generating essential files for establishing a connection with iR-ETN/iR-ETN40R.

## 2. Quick Start

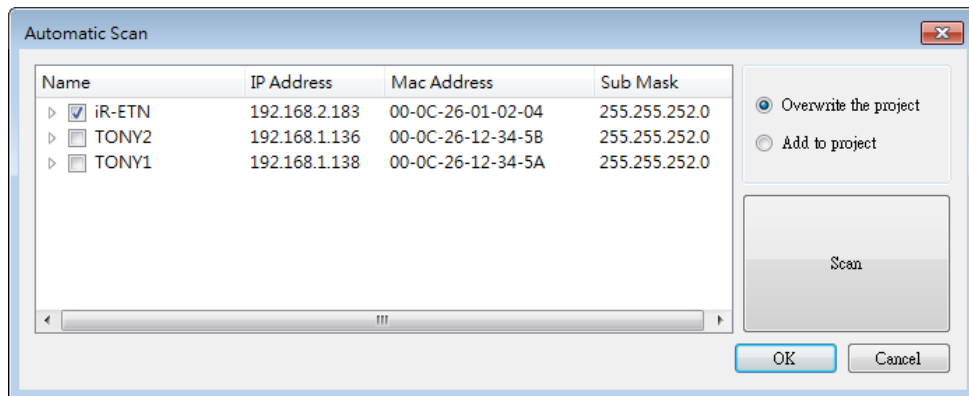
1. Launch EasyRemotelIO, click on [Automatic Scan].



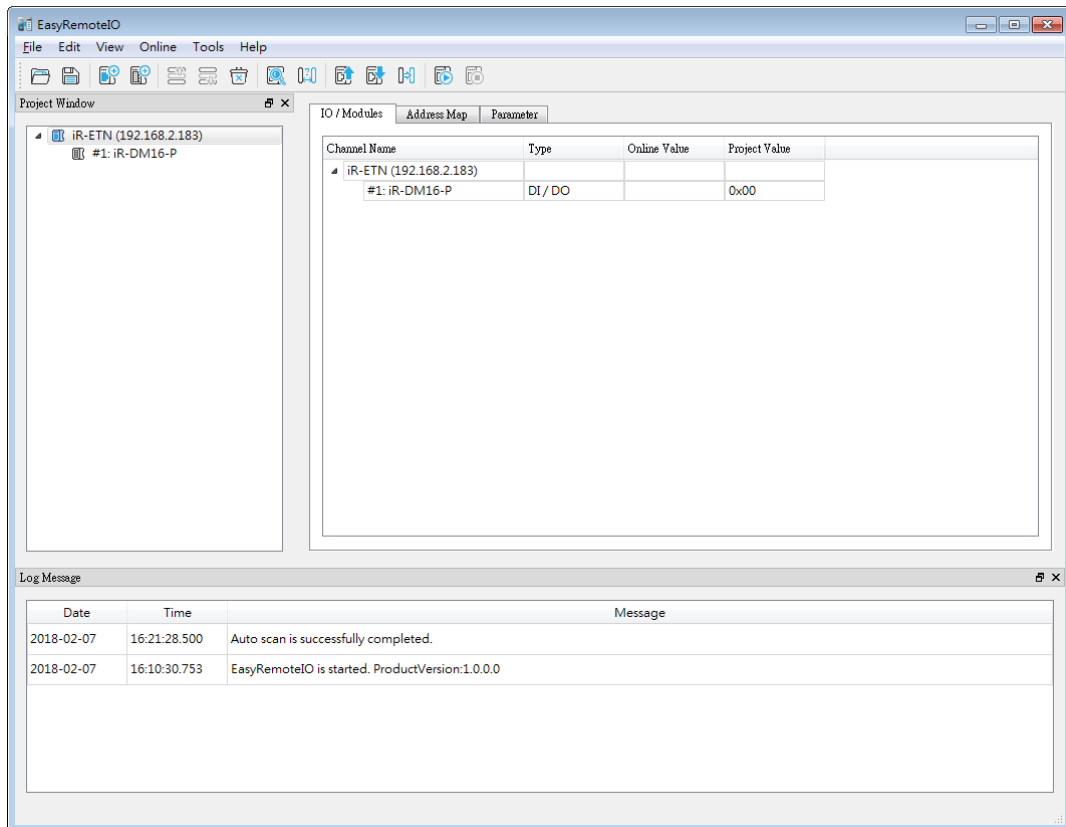
2. Select [Overwrite the project], and click [Scan]. The default IP of iR-ETN/iR-ETN40R is 192.168.0.212. Please make sure the PC is in the same domain: 192.168.0.\*.\*.



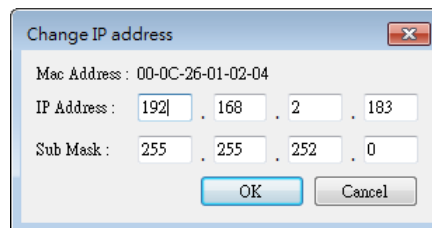
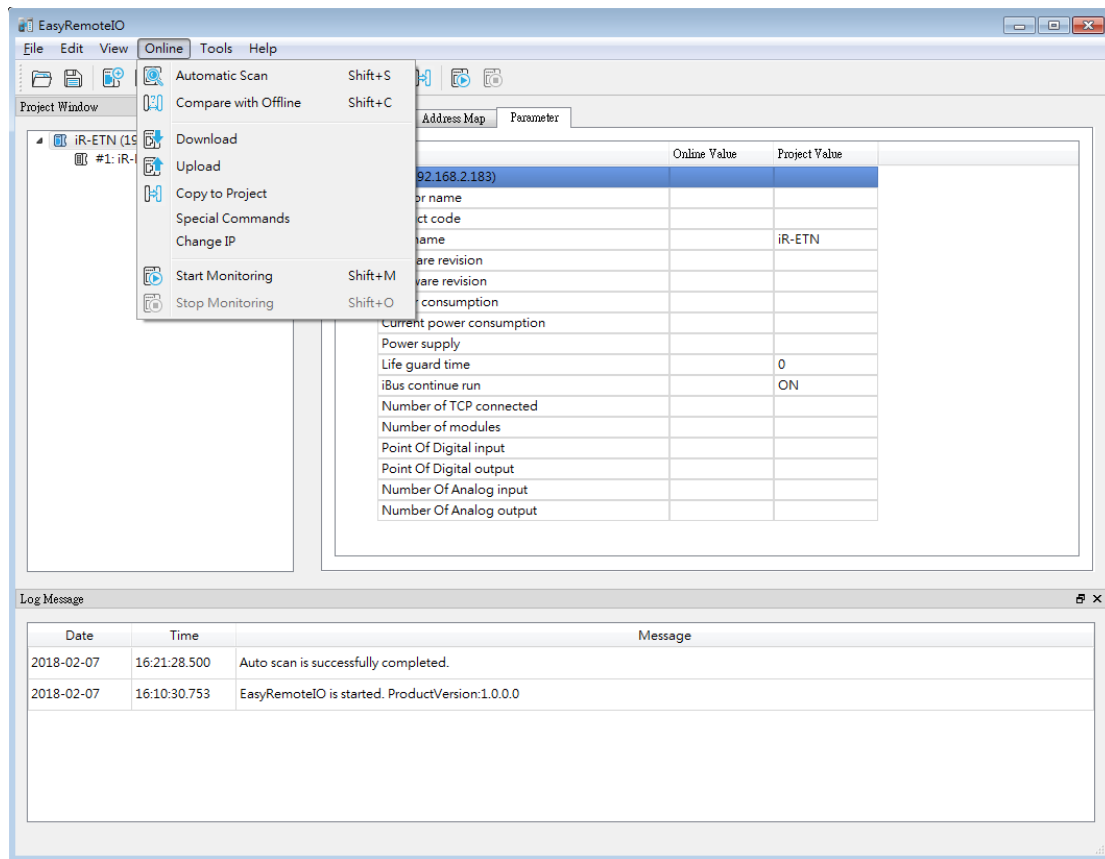
3. The iR-ETN/iR-ETN40R can be found in Automatic Scan window. Select the iR-ETN/iR-ETN40R you want to configure and click OK.



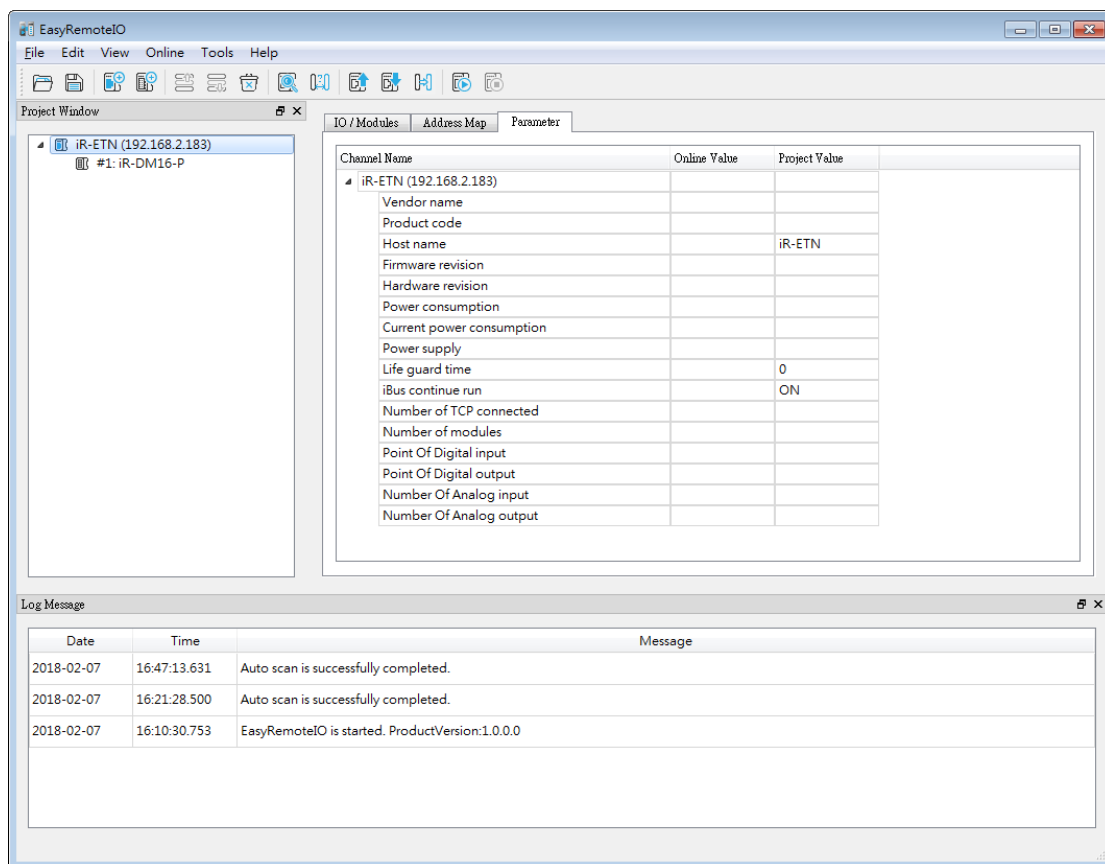
4. The iR-ETN/iR-ETN40R and the module's information will be shown as below.



5. Select [Change IP] under [Online] to change the IP address of iR-ETN/iR-ETN40R and then click OK.

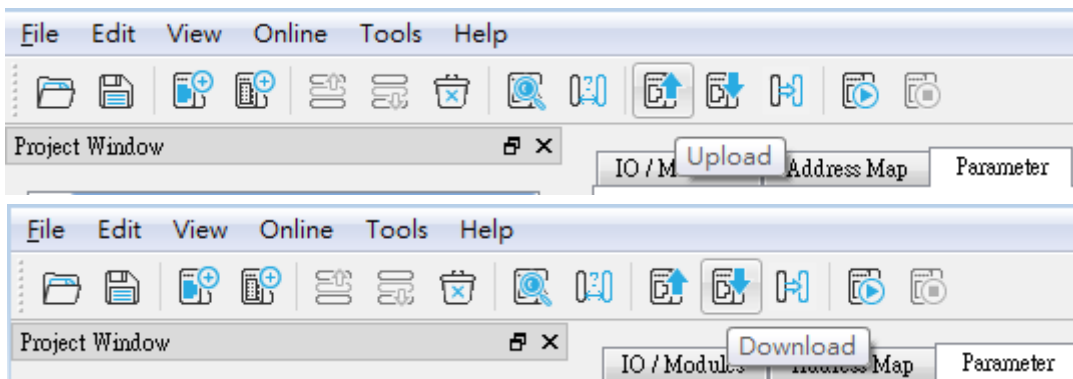


- In the Project Window, select an iR-ETN/iR-ETN40R and then go to [Parameter] tab in the right column. Here you can change the related parameters of iR-ETN/iR-ETN40R. The actual value of iR-ETN/iR-ETN40R is in the [Online Value] column. The new value should be entered in the [Project Value] column.

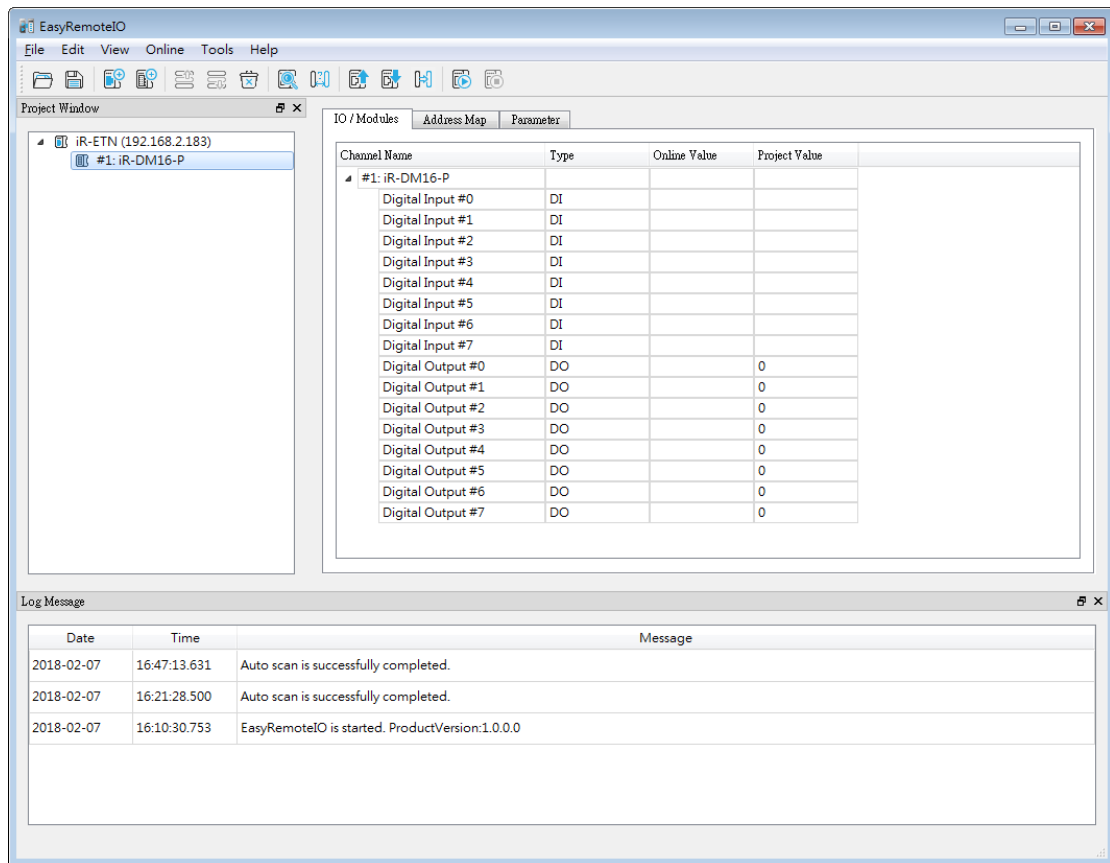


7. Click [Upload] to read the data from iR-ETN/iR-ETN40R and show in EasyRemotelIO.

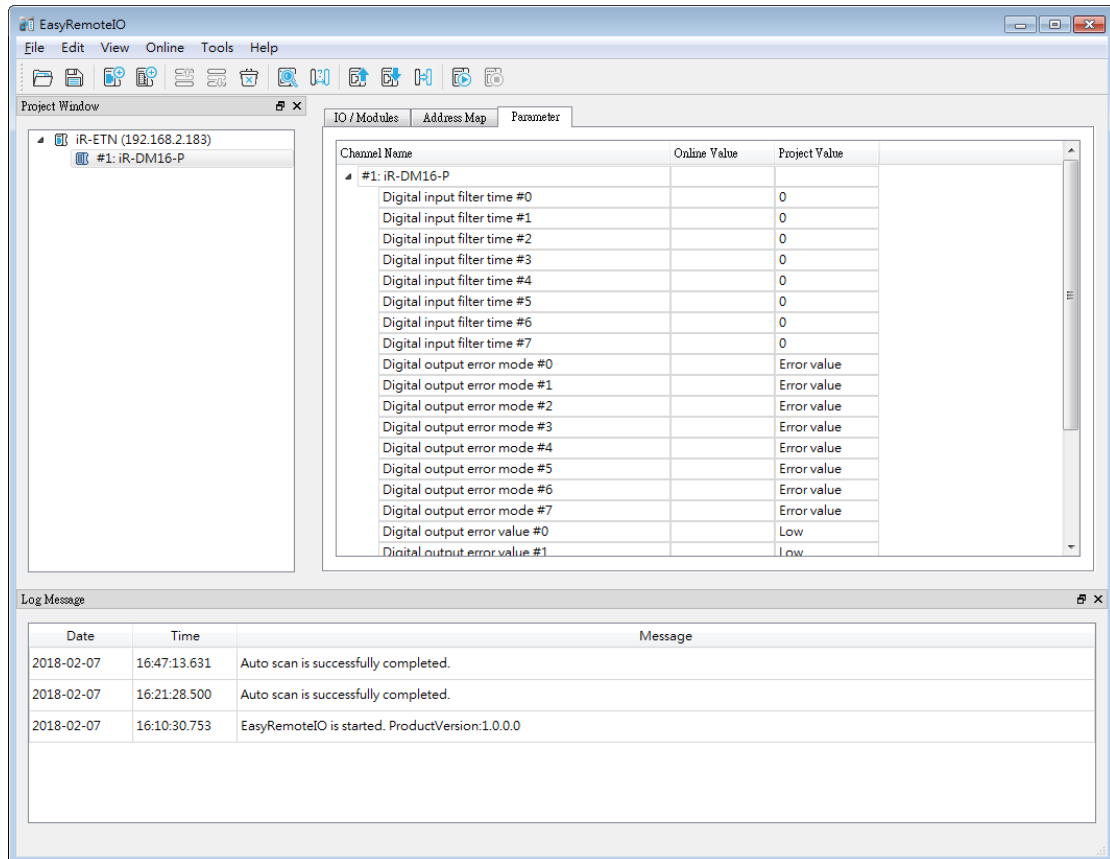
Click [Download] to write the data in EasyRemotelIO to iR-ETN/iR-ETN40R.



8. Select the module connected to iR-ETN/iR-ETN40R 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/iR-ETN40R.



9. The parameters of the modules can be changed in Parameter tab.





### 3. Settings

#### Edit

#### Add

Network Coupler: Add network coupler manually.

Module: Add module manually.

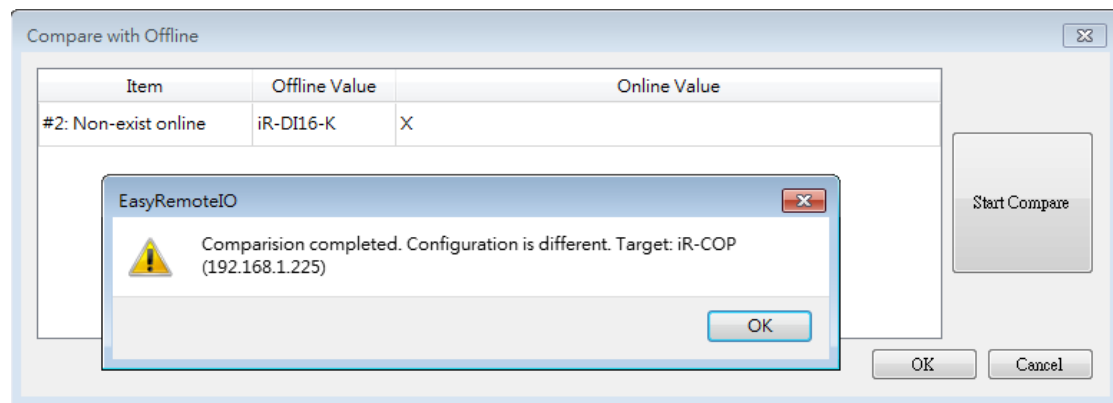
#### Online

##### Automatic Scan

Scan all the iR-ETN/iR-ETN40R 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/iR-ETN40R.

##### Upload

Read the value from iR-ETN/iR-ETN40R and show it in EasyRemoteIO's Online Value column.

##### Copy to project

Read the value from iR-ETN/iR-ETN40R and show it in EasyRemoteIO's Online Value and Project Value columns.

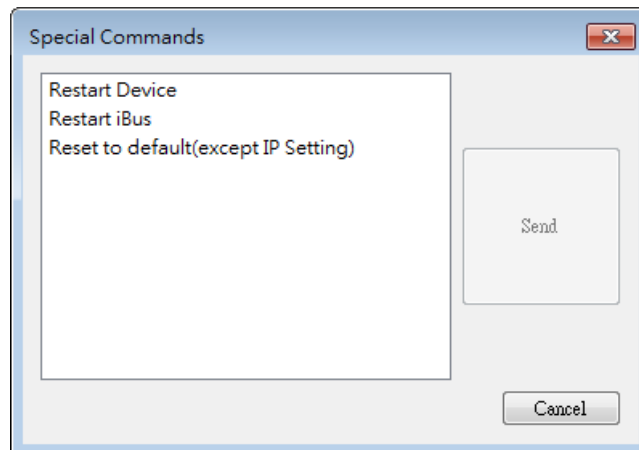
Channel Name	Type	Online Value	Project Value
#1: iR-DM16-P			
Digital Input #0	DI	0	
Digital Input #1	DI	0	
Digital Input #2	DI	0	
Digital Input #3	DI	0	
Digital Input #4	DI	0	
Digital Input #5	DI	0	
Digital Input #6	DI	0	
Digital Input #7	DI	0	
Digital Output #0	DO	0	0
Digital Output #1	DO	0	0
Digital 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.

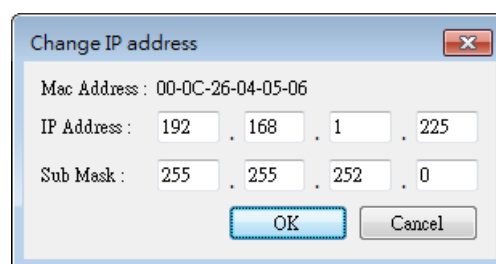
Restart iBus: Restart iBus only.

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



### Change IP

Change the IP address of iR-ETN/iR-ETN40R.



### Start Monitoring

Start monitoring iR-ETN/iR-ETN40R. (Read only)

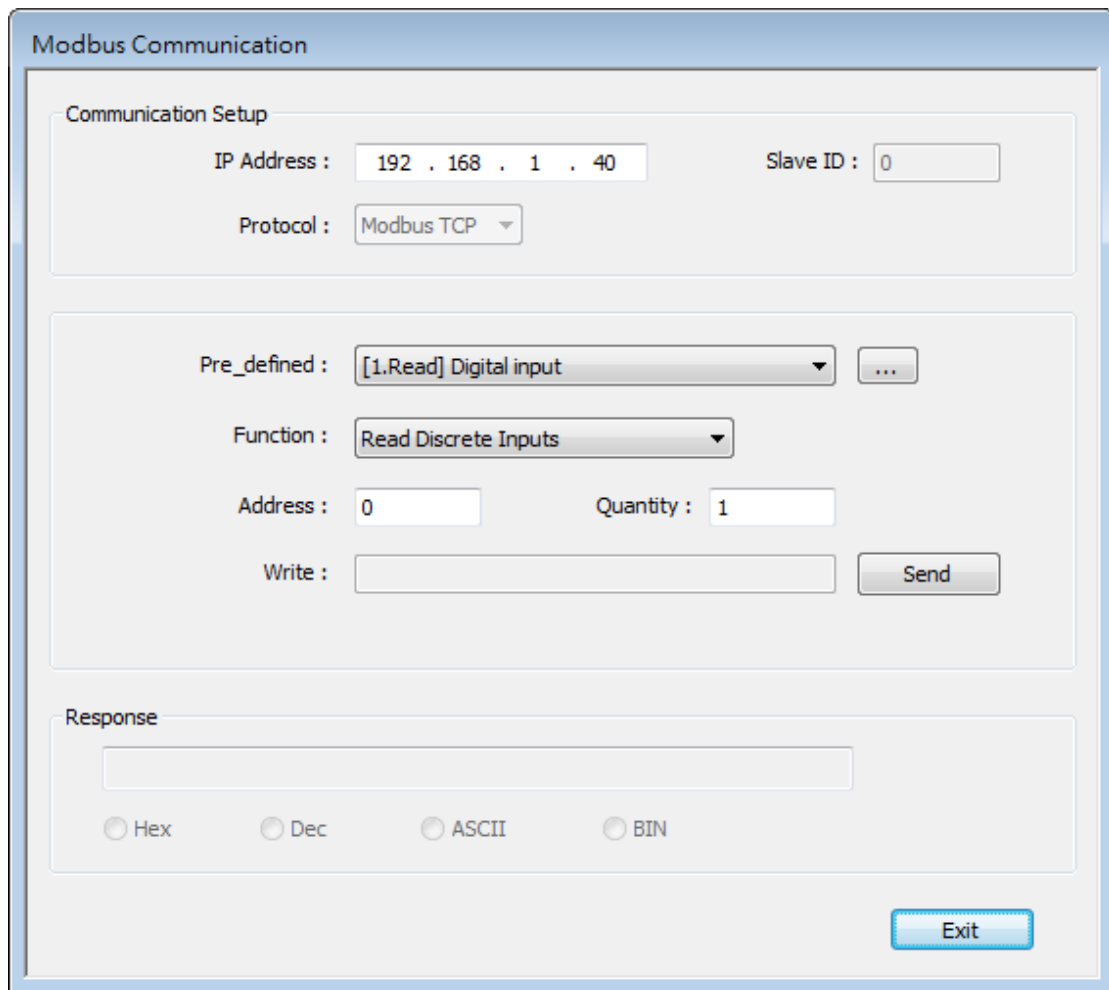
### Stop Monitoring

Stop monitoring iR-ETN/iR-ETN40R.

## Tools

### Modbus

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



The screenshot shows the 'Modbus Communication' window. It is divided into three main sections: 'Communication Setup', 'Pre\_defined', and 'Response'.  
1. **Communication Setup:** Contains fields for 'IP Address' (192 . 168 . 1 . 40), 'Slave ID' (0), and a 'Protocol' dropdown menu set to 'Modbus TCP'.  
2. **Pre\_defined:** Contains a 'Pre\_defined' dropdown menu set to '[1.Read] Digital input', a 'Function' dropdown menu set to 'Read Discrete Inputs', an 'Address' field (0), and a 'Quantity' field (1). There is also a 'Write' field and a 'Send' button.  
3. **Response:** Contains a large empty text box for displaying data and four radio buttons for format selection: 'Hex', 'Dec', 'ASCII', and 'BIN'.  
An 'Exit' button is located at the bottom right of the window.

## 4. Analog Module

### Displaying Channel Value

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

IO / Modules			
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			
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		
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

Change channel parameter under [Project Value].

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].

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

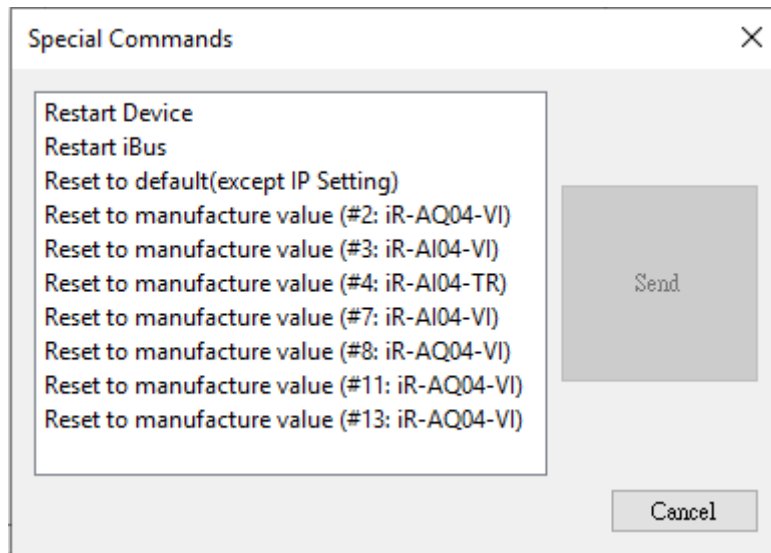
※For more information about channel parameters, see chapter 6 in UM018013E\_iR-Axxx-VI\_UserManual\_20190401\_eng.

※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.

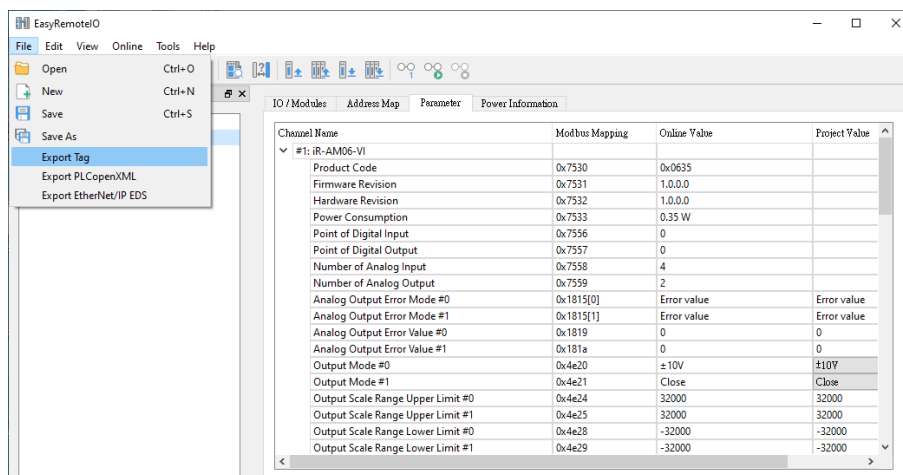


## 5. Export

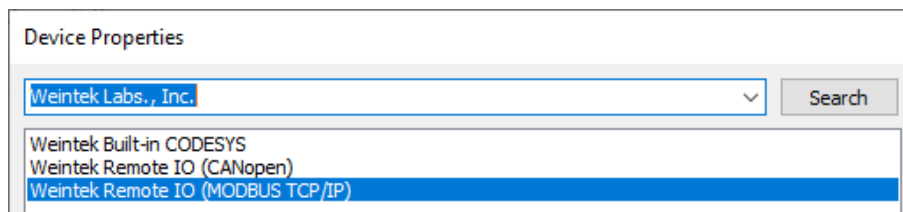
### Export Tag

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/iR-ETN40R related parameters.

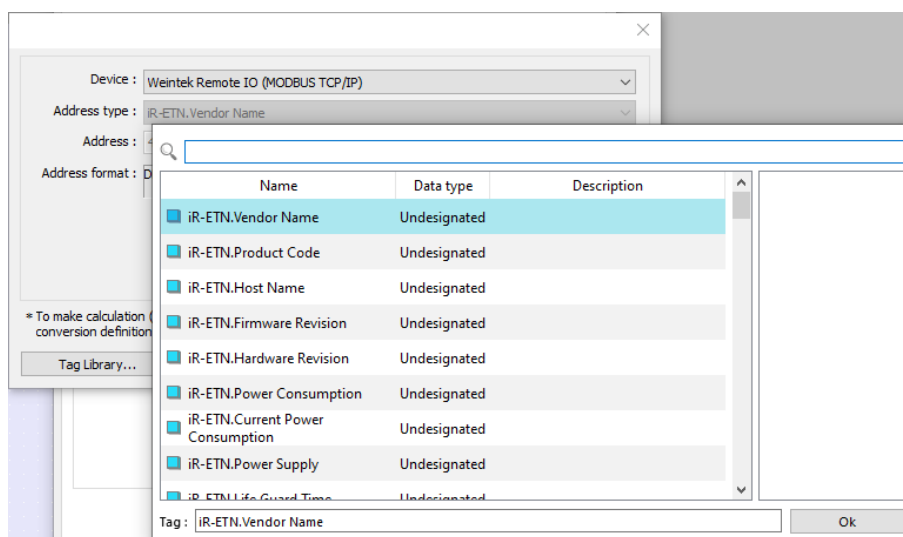
1. Launch EasyRemoteIO and select [File] » [Export Tag].



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



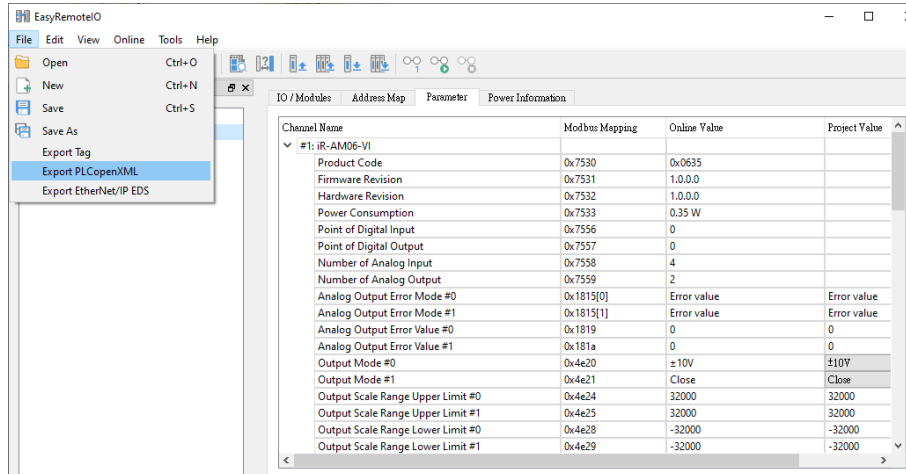
3. After importing tags, information about iR-ETN/iR-ETN40R can be found when creating an object.



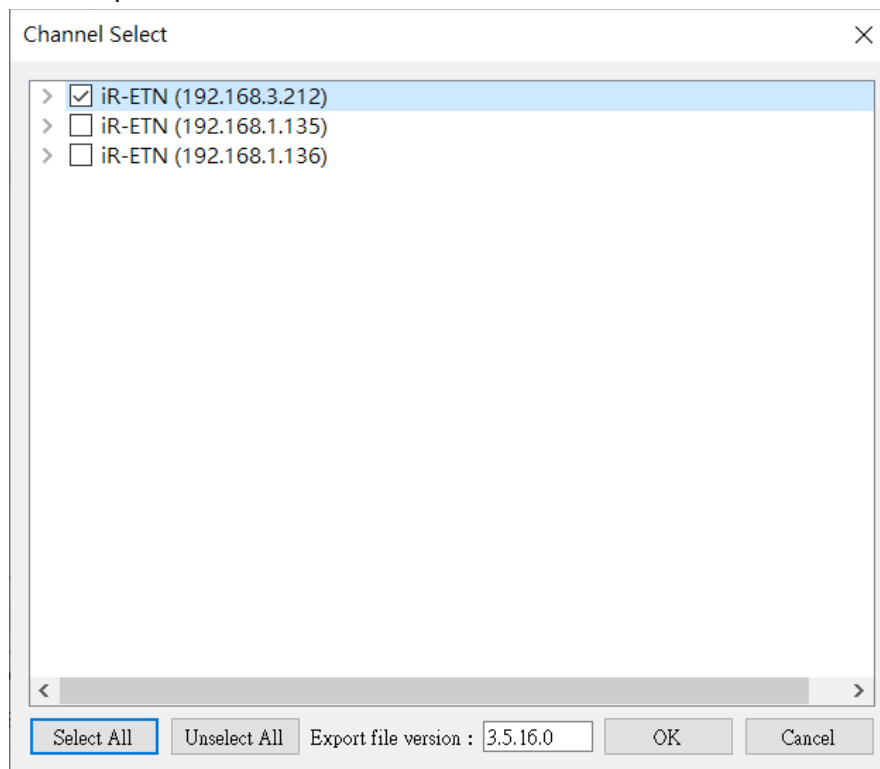
## Export PLCopenXML

Exporting PLCopenXML file can help users quickly build communication parameters when establishing connection between a CODESYS device and an iR-ETN/iR-ETN40R.

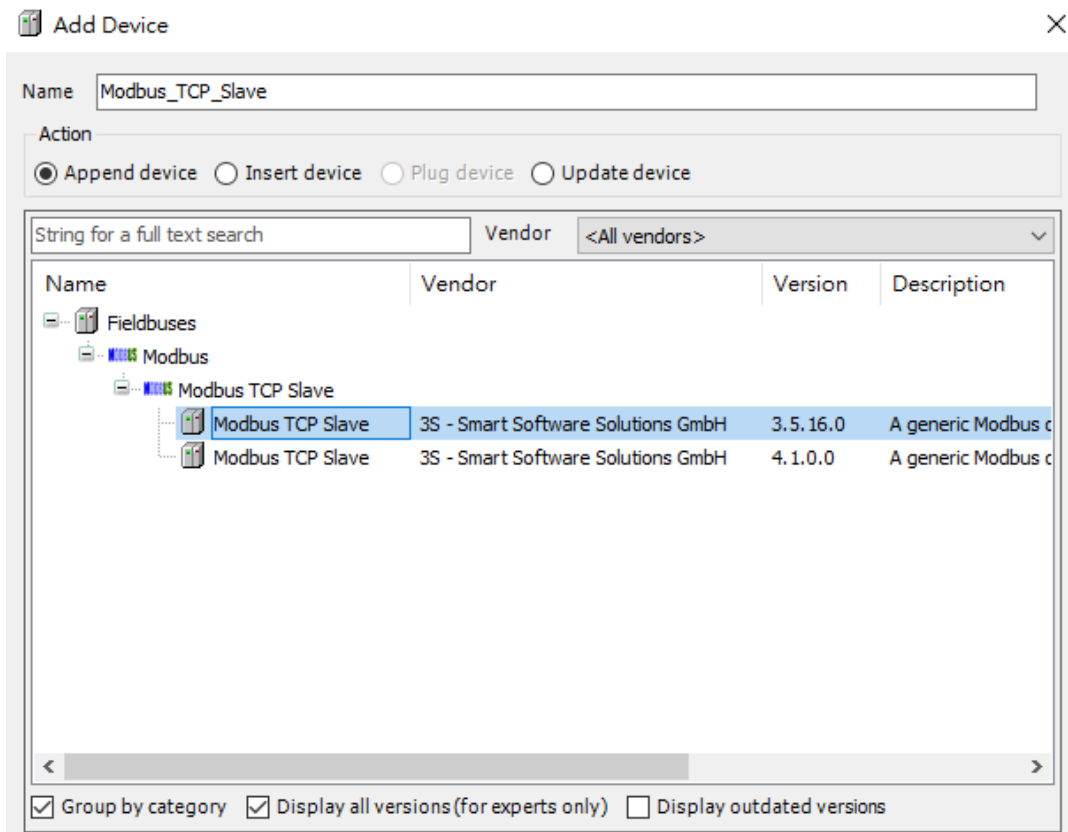
1. Launch EasyRemoteIO and select [File] » [Export PLCopenXML].



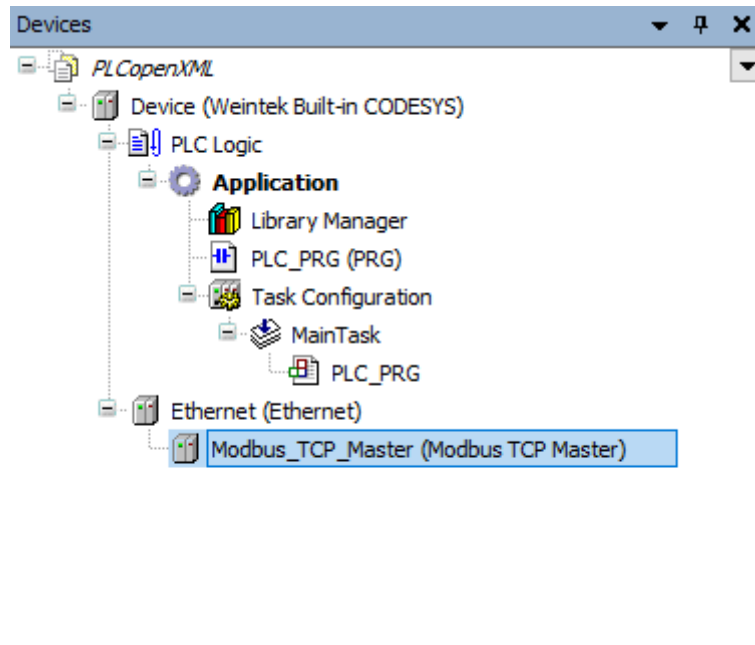
2. Select the device and set the file version to be exported. The file version should be the same as that of the Modbus\_TCP\_Slave in CODESYS IDE. The version used in the example below is 3.5.16.0.



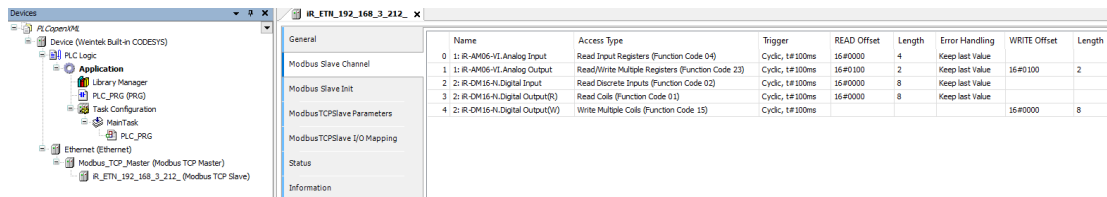




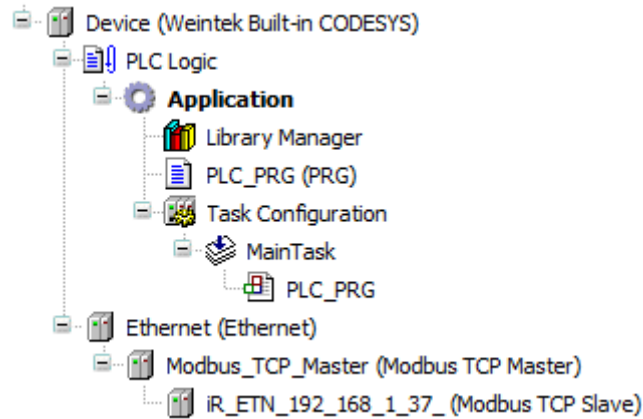
3. Launch CODESYS, add [Ethernet] » [Modbus\_TCP\_Master] device.



4. Select [Project] » [Import PLCOpenXML] to import PLCOpenXML.



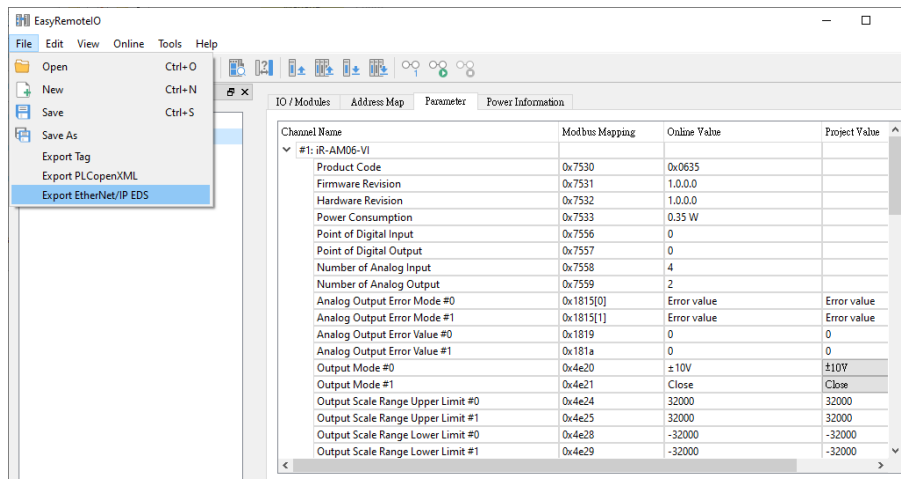
5. After importing the file, the selected iR-ETN/iR-ETN40R can be found in the CODESYS project with the read/write channels and parameters set.



## Export EtherNet/IP EDS

Exporting EtherNet/IP EDS file can generate Electronic Data Sheets of iR-ETN/iR-ETN40R.

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.