

ICP DAS

EIP-2000 FAQ

FAQ Version 1.0

ICP DAS Co., Ltd.

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Q1 : How to connect to the Allen-Bradley PLC ?

A1 : It is tested and confirmed that the EIP-2000 can be connected to the Allen-Bradley™ ControlLogix Logix 5563 through the 1756-ENBT ControlLogix EtherNet/IP Module successfully. The configuration software is RSLogix 5000. Please follow the steps below:

1. Open RSLogix 5000 and create a new project.



Figure1-1. Create a new project.

2. Select the PLC type and give the project a name.

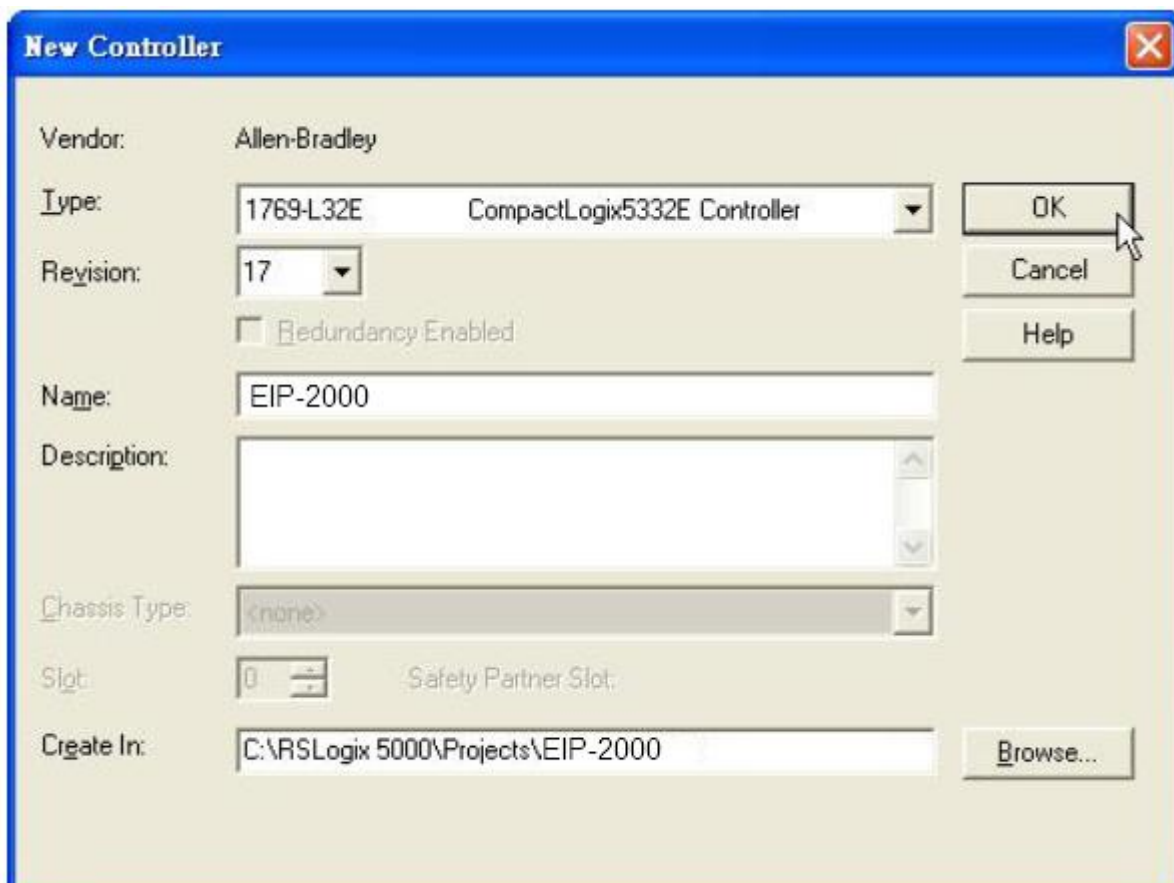


Figure1-2. Set the PLC type and project name.

3. Create a new module in the “Ethernet” item.

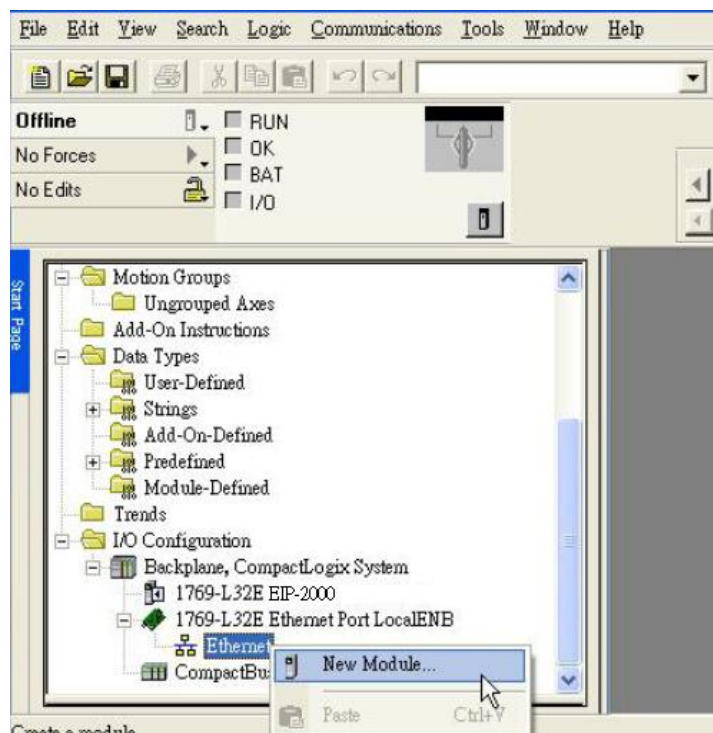


Figure 1-3. Create a new module.

4. Select the “ETHERNET-MODULE” below “Communications” in the Select Module window.

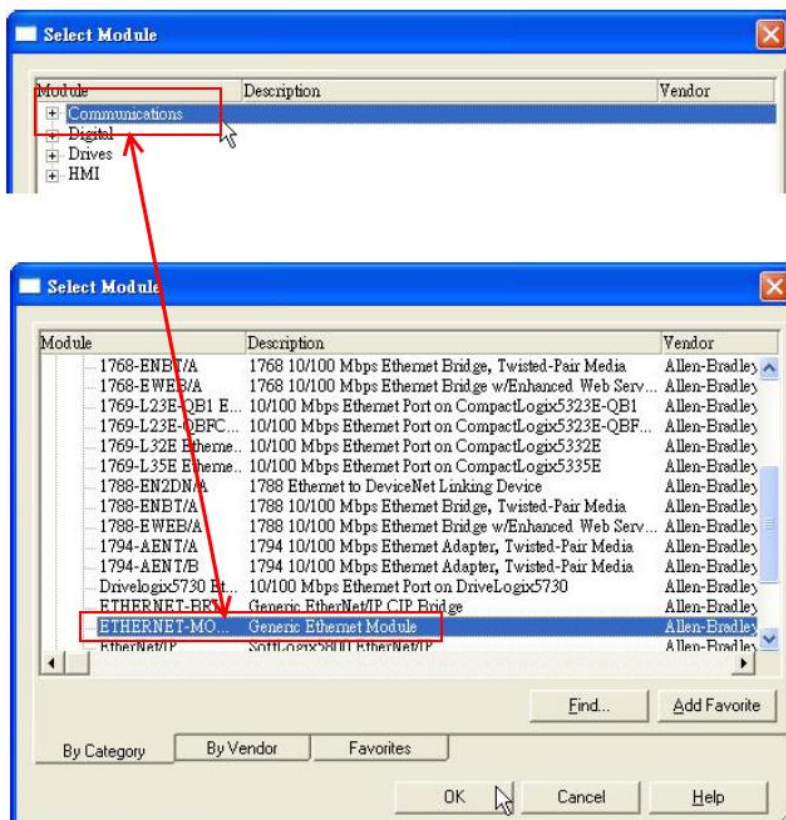


Figure1-4. Select “ETHERNET-MODULE”.

5. Configure the new module parameters. The I/O length of new module must be the same with the length of EIP-2000 I/O data. The data assembly please refer to Table 1-1 and the instance ID please refer to Table 1-2.

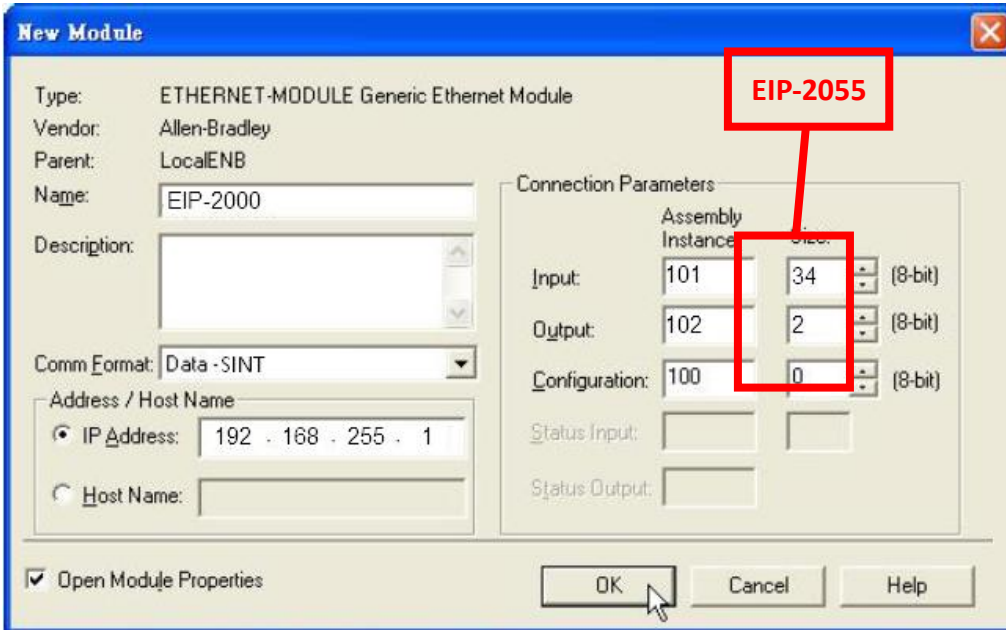


Figure1-5. The settings of EIP-2055

Table 1-1. Data Assembly of EIP-2000

Module	Data Assembly	Byte count	Description
EIP-2055	Input Assembly	34	1 st Byte: DI status
			2 nd Byte: DO status read back
			3 rd ~34 th Byte: DI counters
	Output Assembly	2	1 st Byte: DO status
			2 nd Byte: to set DI counters zero
EIP-2060	Input Assembly	26	1 st Byte: DI status
			2 nd Byte: DO status read back
			3 rd ~26 th Byte: DI counters
	Output Assembly	2	1 st Byte: DO status
			2 nd Byte: to set DI counters zero
EIP-2042	Input Assembly	2	1 st Byte: DO status read back (DO0~DO7).
			2 nd Byte: DO status read back (DO8~DO15).
	Output Assembly	2	1 st Byte: DO status (DO0~DO7).
			2 nd Byte: DO status (DO8~DO15).
EIP-2051	Input Assembly	66	1 st Byte: DI status(DI0~DI7).

			2 nd Byte: DI status(DI8~DI15).
			3 rd ~65 th Byte: DI counters.
	Output Assembly	2	1 st Byte: to set DI counters zero (DI0~DI7).
			2 nd Byte: to set DI counters zero (DI8~DI15).
EIP-2017	Input Assembly	31	1 st ~ 16 th Byte: AI status(AI0~7) for DIFF. or S.E. mode.
			17 nd ~ 31 th Byte: AI status(AI8~15) for S.E. mode only.
	Output Assembly	22	1 st Byte: Set value to the module.
			2 nd ~ 17 th Byte: Set type code to AI0~AI15.
			18 th Byte: Filter selection of AI
			19 th Byte: Channel mode selection DIFF. or S.E.
			20 th Byte: AI representation
			21 th Byte: AI channel selection (AI0 ~ AI7)
			22 th Byte: AI channel selection (AI8 ~ AI15)
EIP-2019	Input Assembly	20	1 st ~ 16 th Byte: AI status(AI0~AI7).
			17 nd ~ 18 th Byte: The Brocken wire status.
			19 rd ~ 20 th Byte: CJC status.
	Output Assembly	21	1 st Byte: Set value to the module.
			2 nd ~ 7 th Byte: Set type code to Ch0~Ch7.
			8 th Byte: Filter selection of AI
			9 th Byte: Wire break detector
			10 th Byte: AI representation
			11 th Byte: Select AI channel to be short
			12 th Byte: CJC switch
13 th Byte: CJC increment			
	14 th ~ 21 th Byte:CJC Offset		

Table 1-2. Instance ID table of EIP-2000

Implicit Message Information of EIP-2000		
Instance	Instance ID	Data length
Input(T->O)	65 _{hex} (101)	Depends on modules. e.g.34(EIP-2055)
Out(O->T)	66 _{hex} (102)	Depends on modules. e.g.2(EIP-2055)
Configuration	64 _{hex} (100)	

Q2 : How to use EDS file of EIP-2000 series ?

A2 : EDS file is a convenient way to make the connection between EtherNet/IP Scanner and Adapter. All the EIP-2000 series EDS file can be download on our website:

http://www.icpdas.com/products/Remote_IO/can_bus/EtherNet_IP_series.htm

We provide the connection steps of Hilscher CIFX 50-RE with EIP-2055 EDS file. The configuration software is SYNCON.net. Please refer to the steps below :

1. Open SYNCON.net and create a new project.

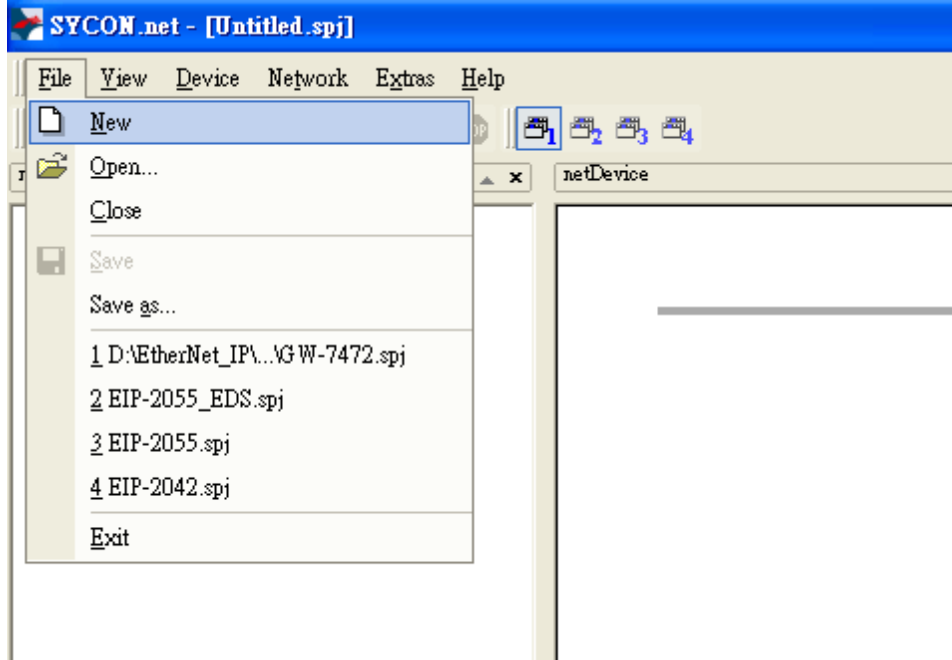


Figure2-1 Create a new project.

2. To find the "CIFX RE/EIM" item below "EtherNet/IP -> Master", and drag the "CIFX RE/EIM" to the busline.

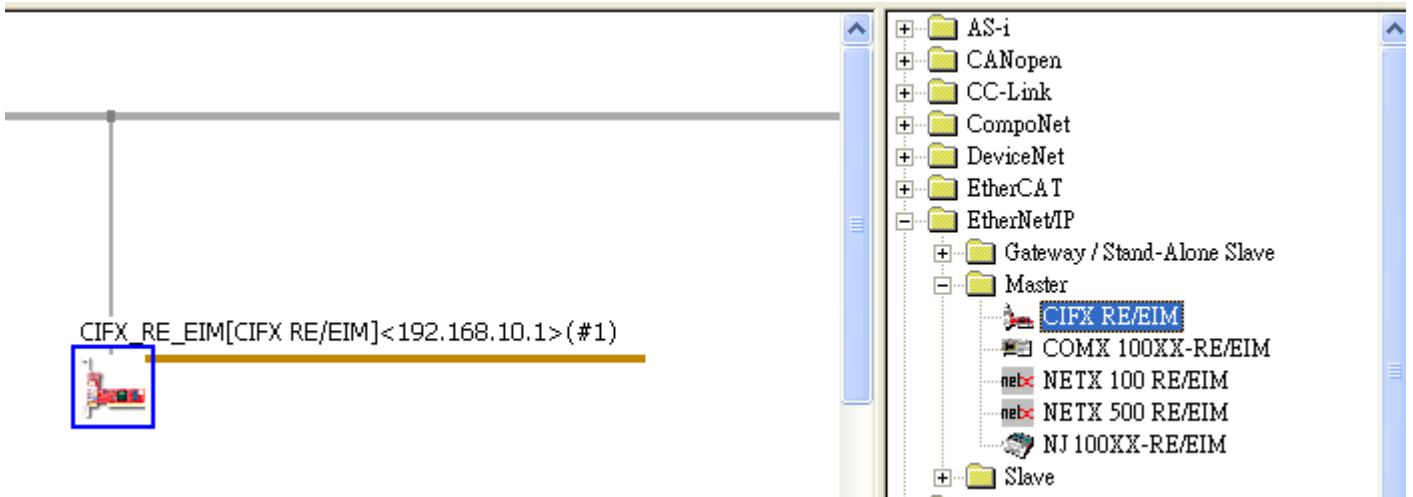


Figure2-2 Select CIFX RE/EIM

3. Click “Network” and select “Import Device Descriptions”.

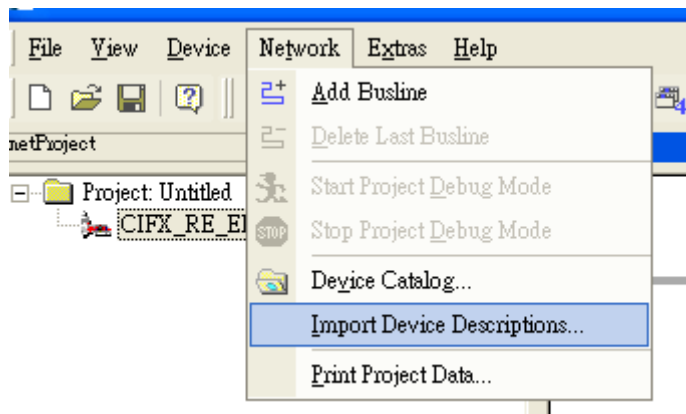


Figure2-3 Import Device Descriptions

4. To select the EDS file you download on our website of CD.

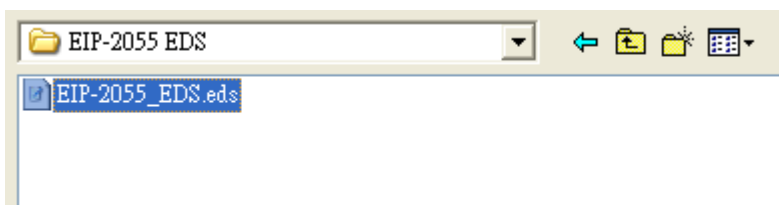


Figure2-4 Select EDS file

5. To find the “EIP-2055 EDS V1.1” item below “EtherNet/IP -> Slave”, and drag the “EIP-2055 EDS V1.1” to the busline.

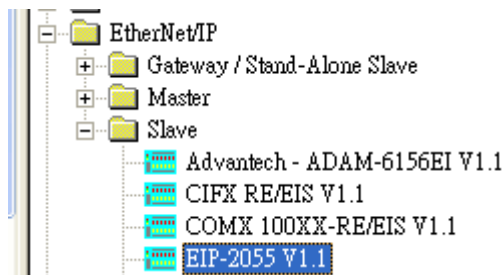


Figure2-5 EIP-2055 EDS

6. To configure CIFX RE/EIM and EIP-2055 in the same network area.

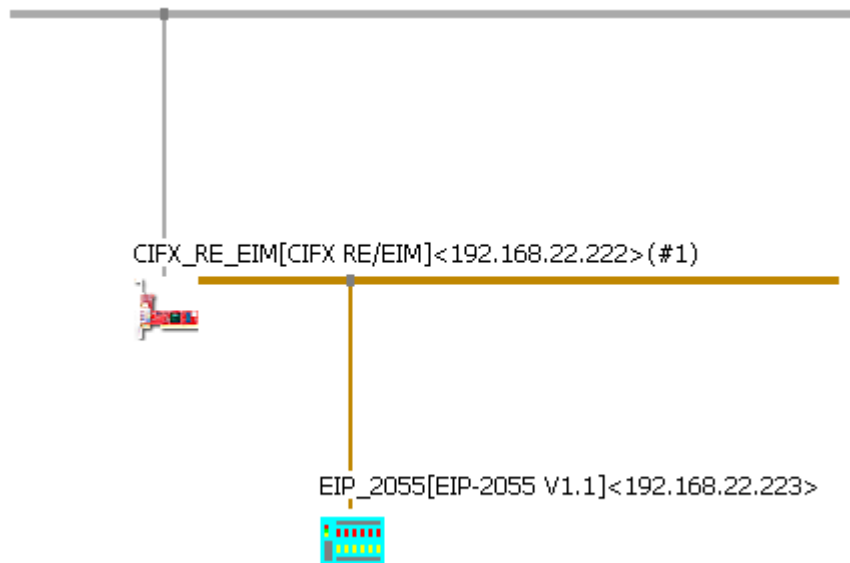


Figure2-6 Network Settings

7. Right click the CIFX_RE/EIM and click "Download".

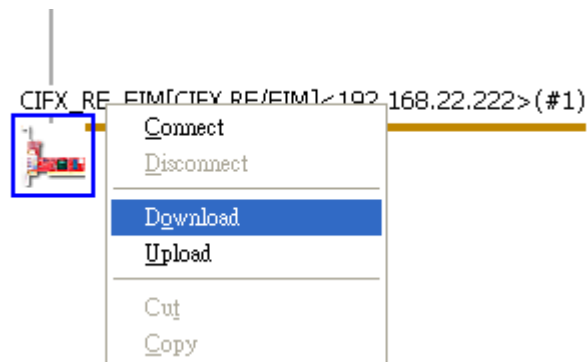


Figure2-7 Download configurations.

8. Right click the CIFX_RE/EIM again and click “Start Communication”.

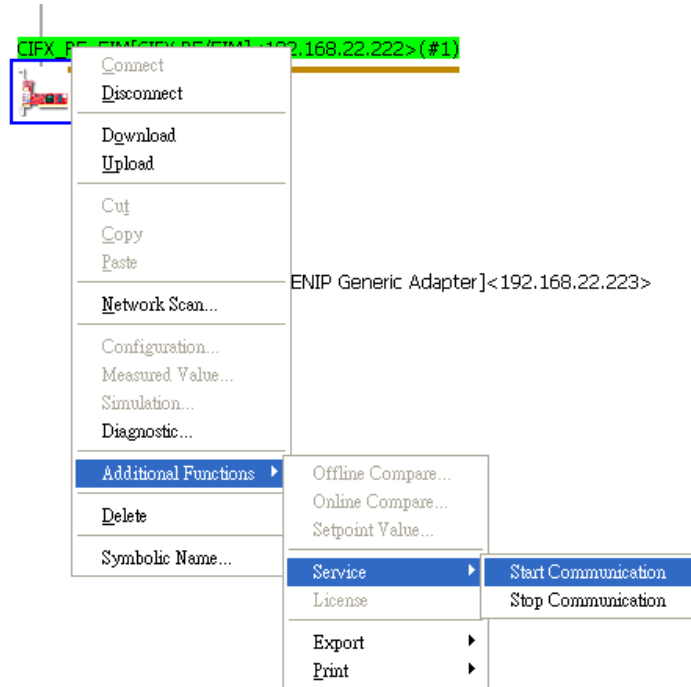


Figure2-8 Start Communication

9. The communication is complete. You can observe the I/O status on the Diagnostic window.

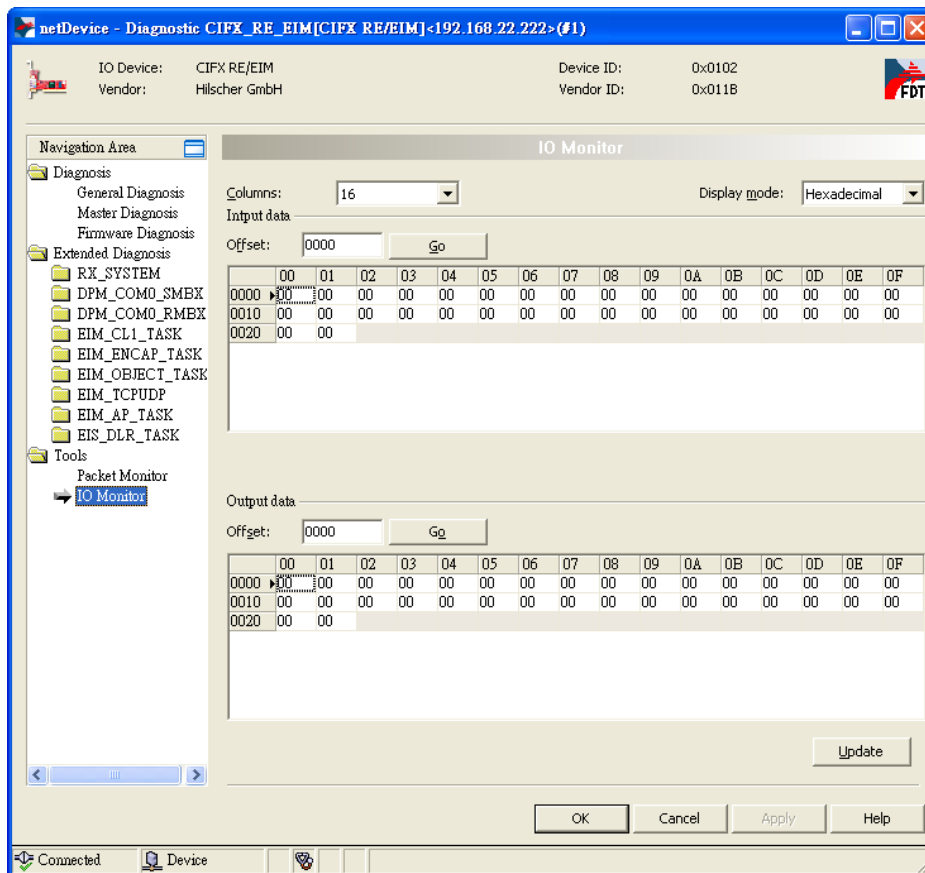


Figure2-9 I/O status observation