

## Schneider Ethernet(TCP)

### Directory

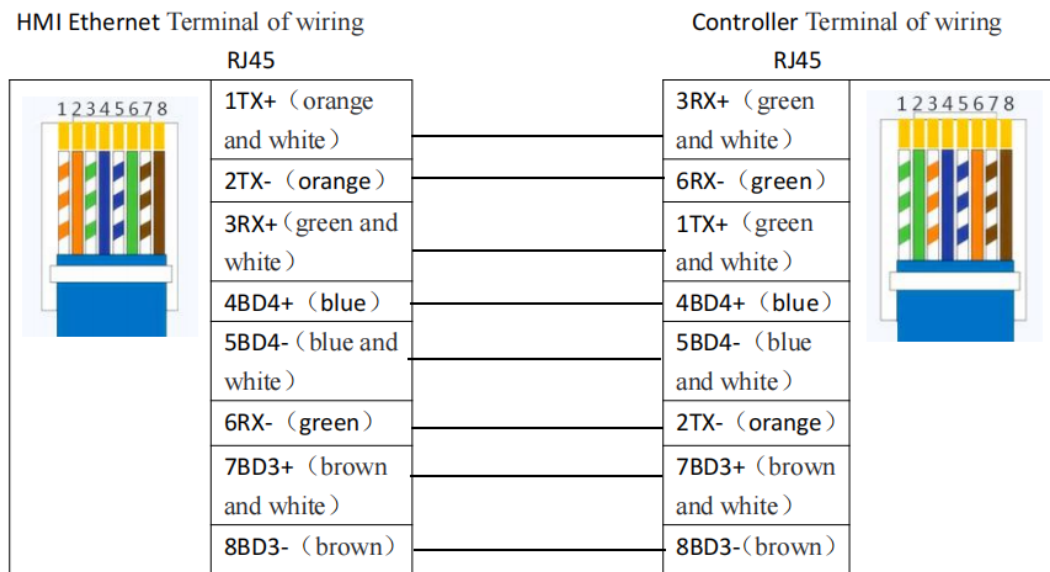
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## ❖ 1 Introduction to Driver

Drive Protocol	Schneider Ethernet(TCP)
PLC Model	TM258LD42DT、TM258LF42DT、TM241CEC24R
Website	<a href="https://www.schneider-electric.cn/zh/all-products/">https://www.schneider-electric.cn/zh/all-products/</a>
Means of communication	Ethernet
PLC interface	Ethernet
PLC station number	502
On line simulation	Support

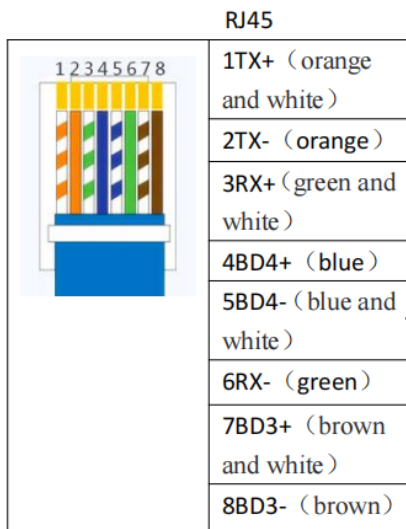
Hardware wiring method:PLC does not communicate with HMI directly through HUB or SWITCH, then use crossover network cable; if it communicates with HMI through HUB or SWITCH, then use either direct connection or crossover network cable.

### A.Crossover cable wiring diagram

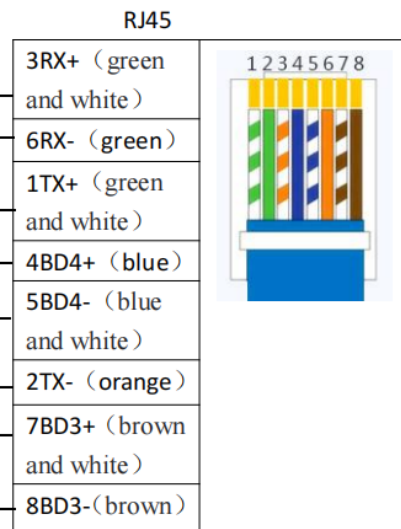


### B.Wiring diagram of the direct cable

HMI Ethernet Terminal of wiring

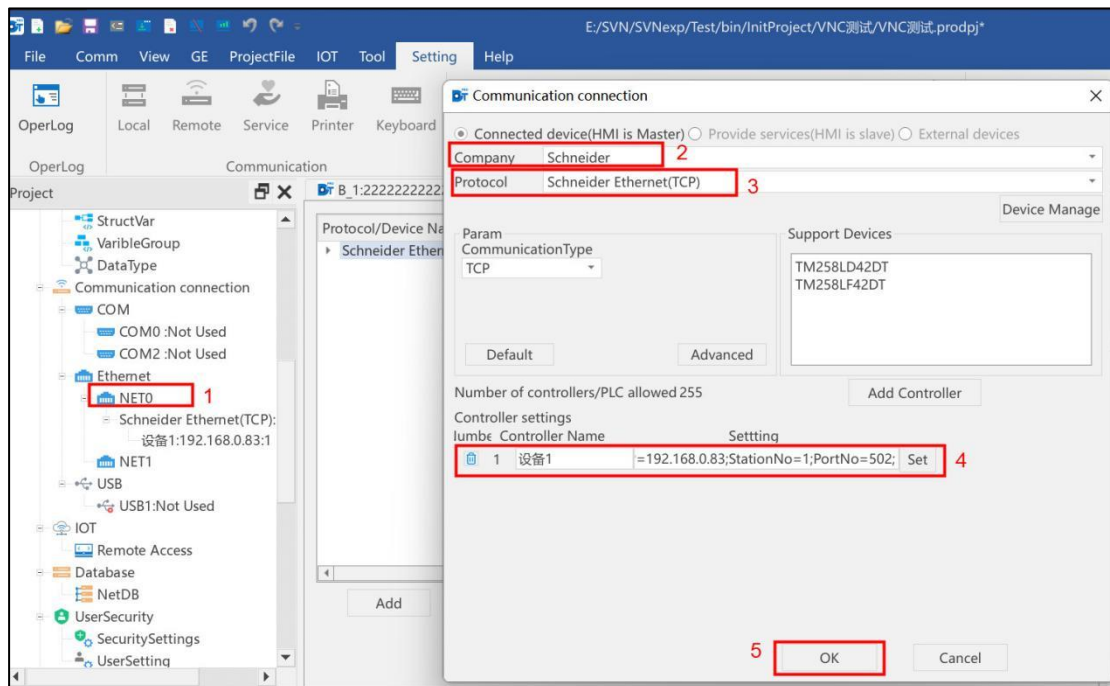


Controller Terminal of wiring



## ❖ 2 HMI Configuration

### ➤ Add driver protocol



- (1) Project - Communication Connection - Ethernet - NET0: click the "Add" button;
- (2) The input field after the word "Company" is select manufacturer; Select the corresponding communication protocol in the input field next to Protocol. Select the external controller brand Scheider (if there is no corresponding controller manufacturer, please refer to the manual << Common Equipment Management >> for configuration).
- (3) Communication(protocol select Schneider Ethernet(TCP) protocol;
- (4) Set the controller IP address, station number, and port number (The default port number is 502. Do not change the port number. Otherwise, communication may fail.)

(5) Click OK to configure the communication connection. If you do not see the "OK" button in the communication connection window, please scroll down the screen with the mouse.

➤ Add variables

(1) Variable - External variable Select the PLC to create the variable

(2) Click Add on the right and create according to the required data type

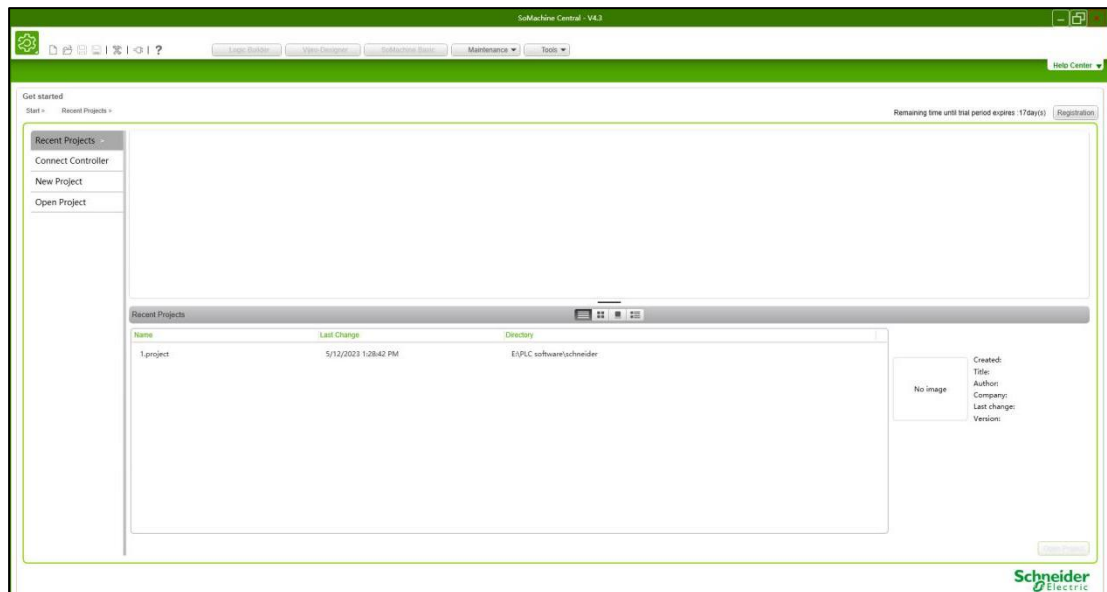
(3) Information screening, which can be screened through the above data screening



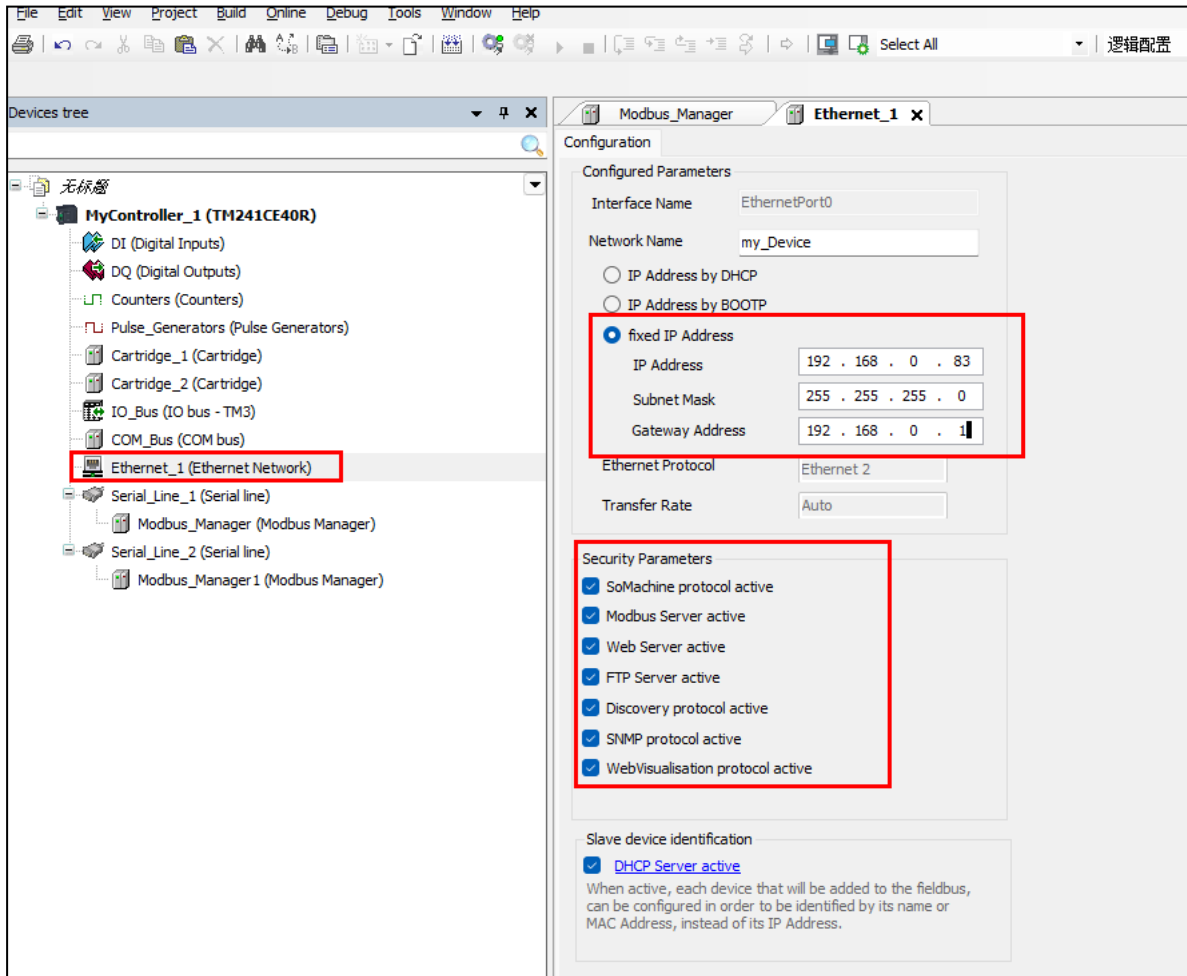
### ❖ 3 External Controller Configuration

The Somachine software version used in this manual is V4.3 and the PLC model is TM241CEC24R.

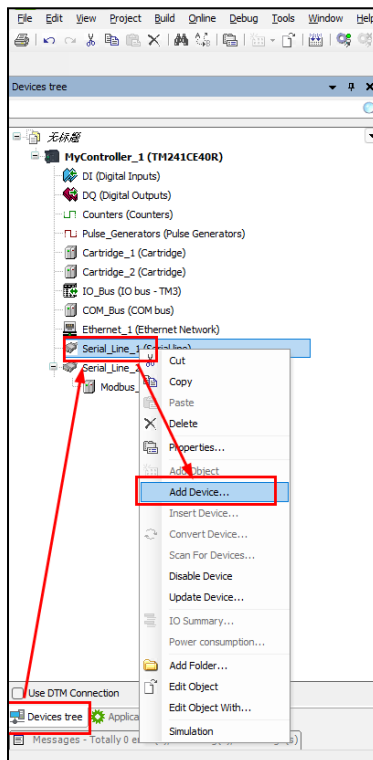
1. In Somachine software, choose and link to the same type PLC ,then create a new program.



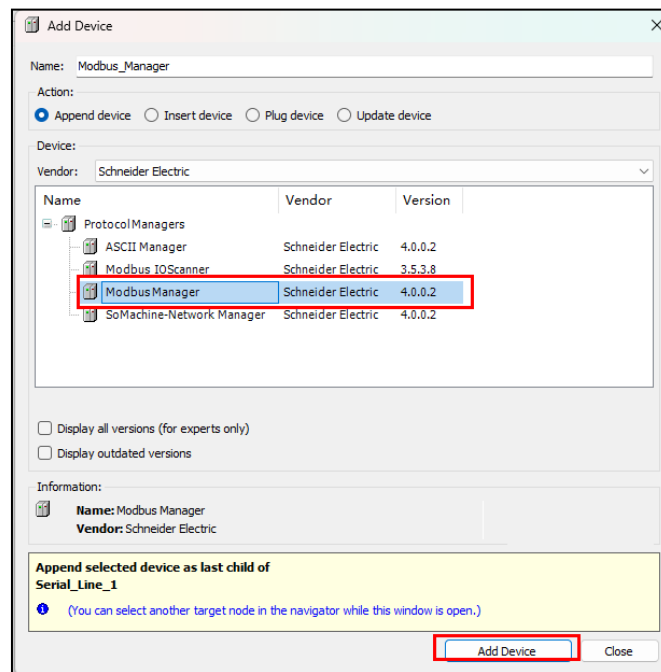
2. After opening the project, if you need to change the IP address, select the device tree on the left, double-click Ethernet to complete the IP setting, and click the login under the online option to complete the IP configuration of PLC, The following safety parameters ensure that the modbus protocol is activated. (Note: The subnet mask and gateway must be set correctly. Ethernet protocol is Ethernet 2.)



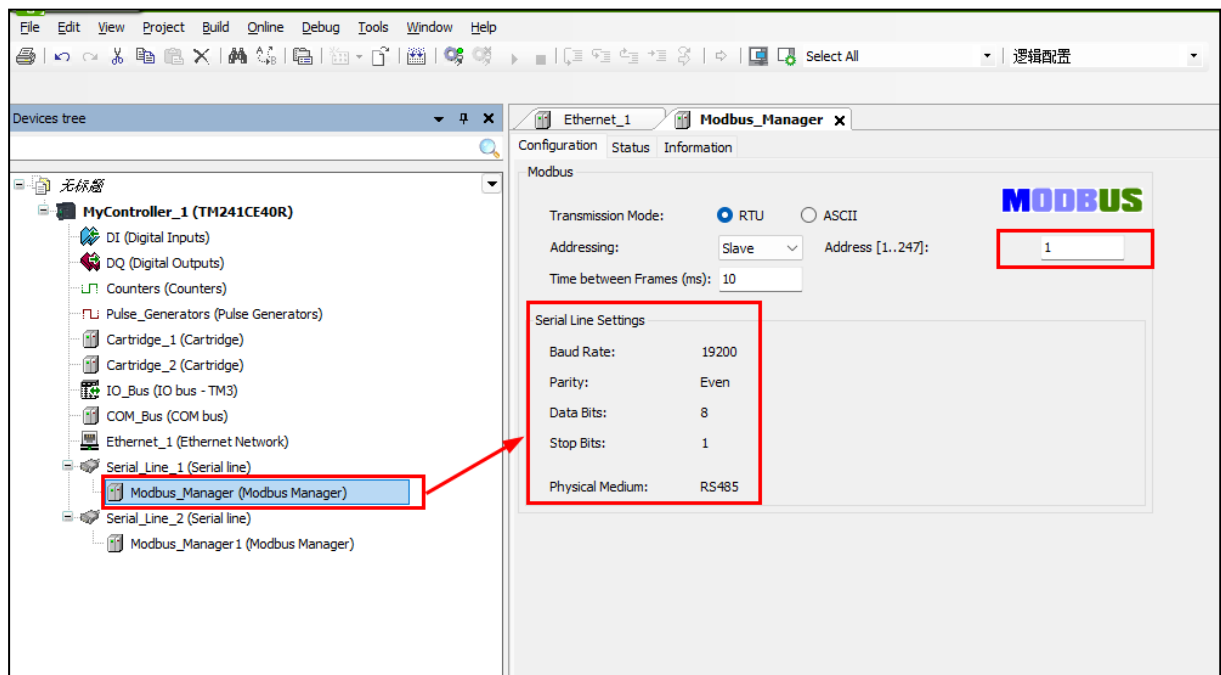
3. Configure modbus; select the device tree on the left, right-click Serial Line and select Add Device



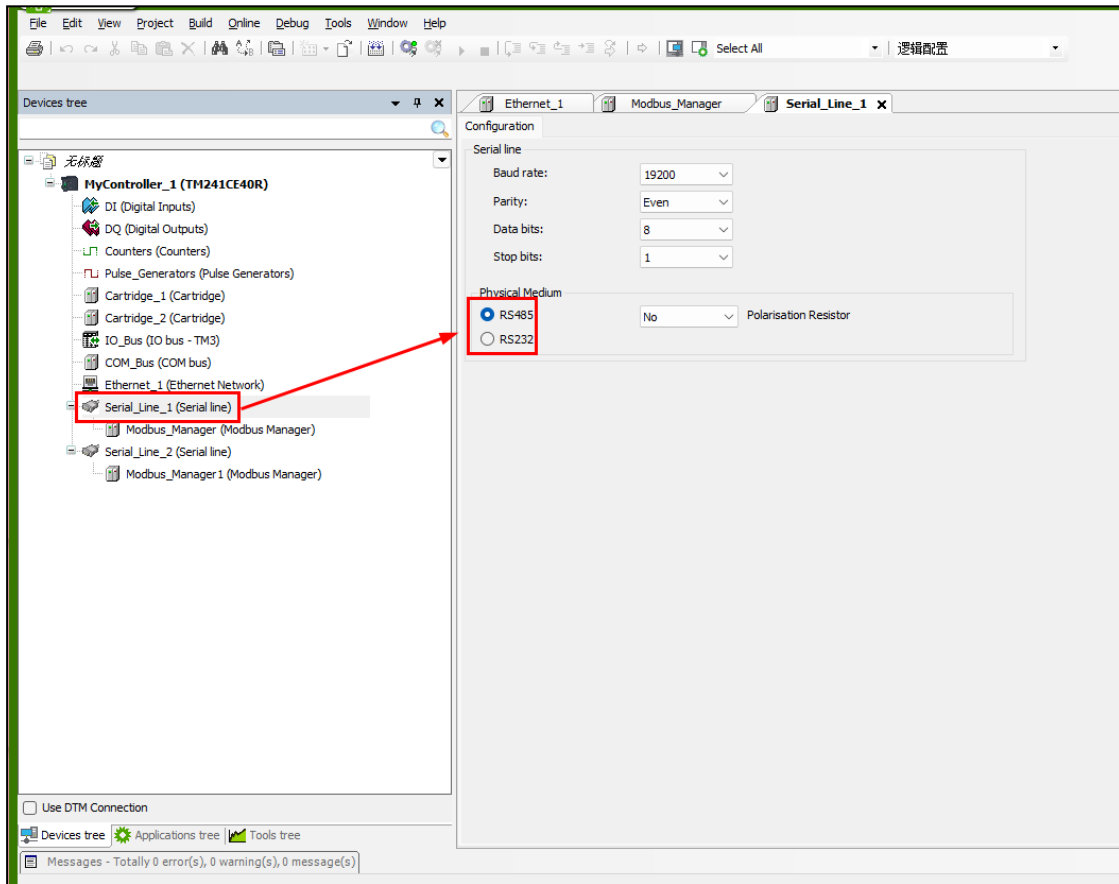
4. In the Add Device window check Modbus Manager and click Add Device.



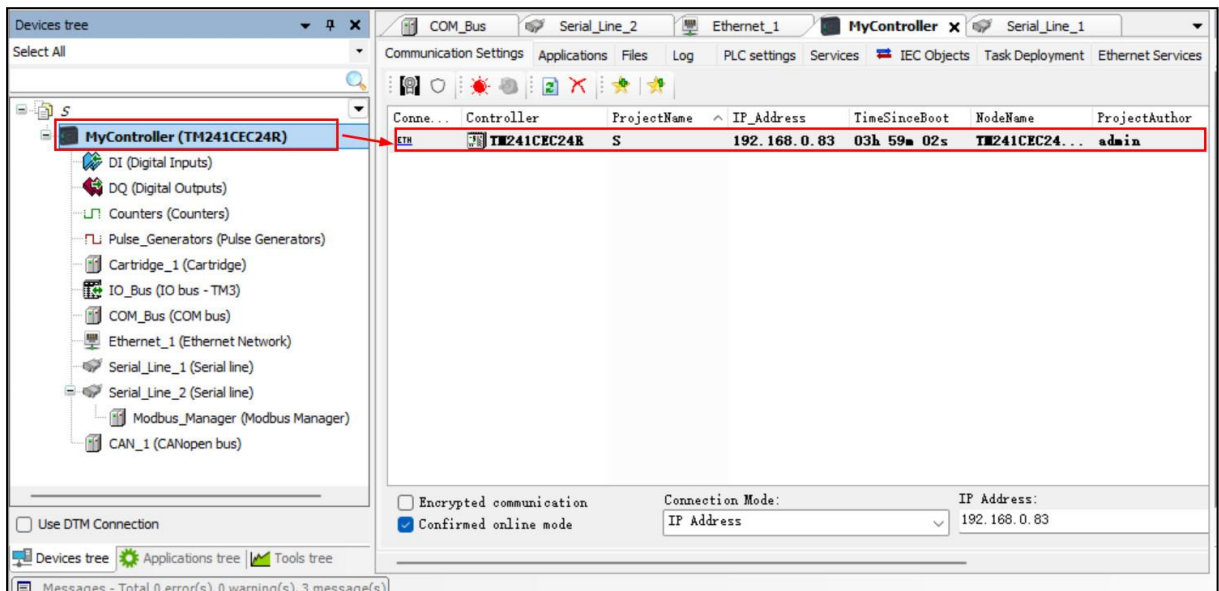
5. Double click Modbus Manager under Serial Line and click Login under Online Options after setting parameters.



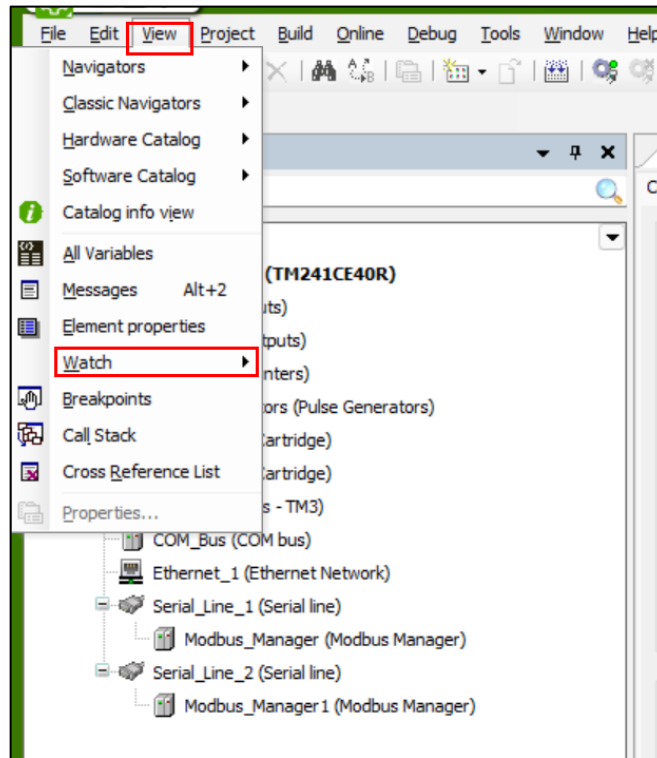
6. To switch the communication type, double click Serial Line and select RS232/RS485 communication on the right side.



7.If you don't need to change the IP Address of the PLC, double click [Mycontroller]then choose the right model PLC, click [online]and [log on].



8.To monitor the internal data of the controller in real time, select Monitoring in the view. The monitoring bar is displayed in the lower part of the page. Enter the monitoring address.



## ❖ 4 Supported Register Types

Device	Bit Address	Word Address	Format	Notes
QX	QX(0-32767).(0.7)	-----	DDDDD.O	R/W
IX	IX(0-32767).(0.7)	-----	DDDDD.O	Read
MX	MX(0-119999).(0.7)	-----	DDDDDD.O	R/W
MB	-----	MB00000-119999	DDDDDD	
MW	-----	MW00000-59999	DDDDD	
MD	-----	MD00000-29999	DDDDD	

## ❖ 5 Advanced parameters and error messages

Reference Manual - Communication Advanced Parameters and Error Information Table