

 **POSITAL**
IXARC Absolute
Encoder With
Profinet Interface



POSITAL IXARC Absolute Encoder With Profinet Interface User Guide

[Home](#) » [POSITAL](#) » POSITAL IXARC Absolute Encoder With Profinet Interface User Guide 

Contents

- [1 POSITAL IXARC Absolute Encoder With Profinet Interface](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 Create a New Project](#)
- [5 Configure a Device](#)
- [6 Add a PLC](#)
- [7 Add the GSDML File](#)
- [8 Assign the Encoder](#)
- [9 Establish the Connection](#)
- [10 Assign Device Name](#)
- [11 Compile and Download the Project](#)
- [12 Go Online](#)
- [13 Monitor Values](#)
- [14 Preset Value](#)
- [15 Frequently Asked Questions](#)
- [16 Documents / Resources](#)
 - [16.1 References](#)
- [17 Related Posts](#)

 **POSITAL**

POSITAL IXARC Absolute Encoder With Profinet Interface



Product Information

Specifications

- Product: Absolute Encoder with PROFINET Interface
- Interface: PROFINET
- Compatibility: PLCs
- Communication Protocol: GSDML
- Configuration: Module Access Point

Product Usage Instructions

Create a New Project

1. Configure a Device
2. Add a PLC
3. Download the correct GSDML File from the manufacturer's website
4. Install the GSDML file

Add and Configure the Encoder

1. Click on 'Not Assigned' in the encoder frame
2. Assign it to the corresponding PLC
3. Set the IP address of the Encoder

Establish Connection and Configuration

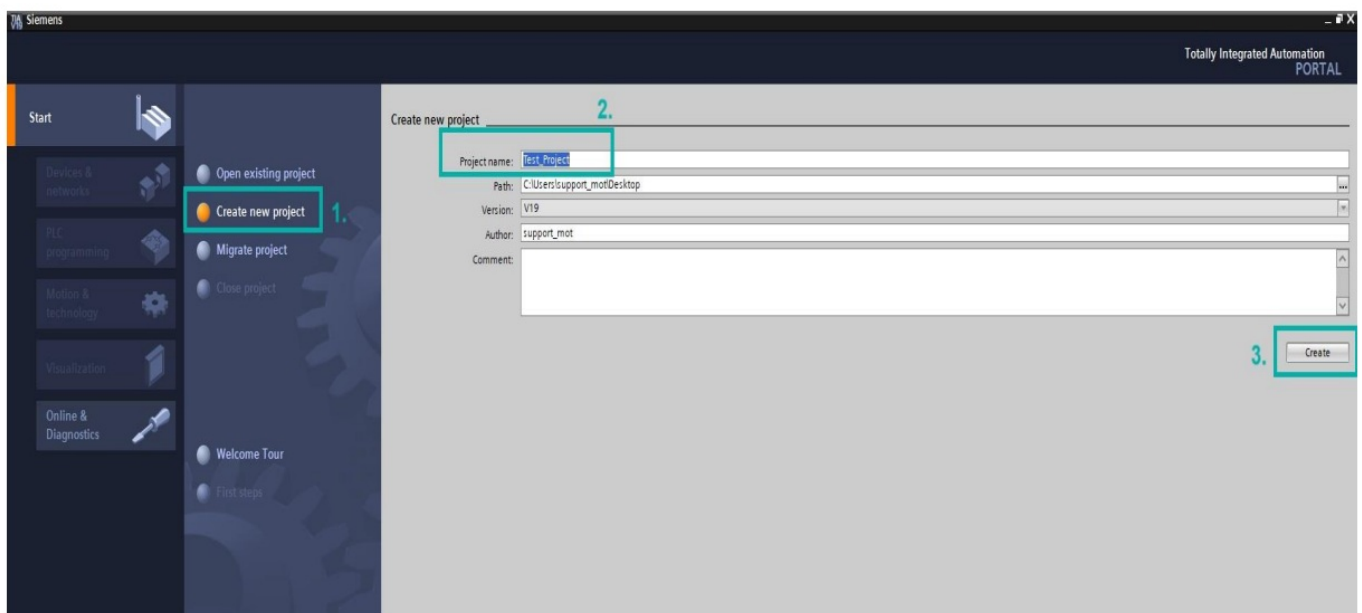
1. Choose Telegram

2. Assign Device Name
3. Compile and Download the Project
4. Go online to start monitoring

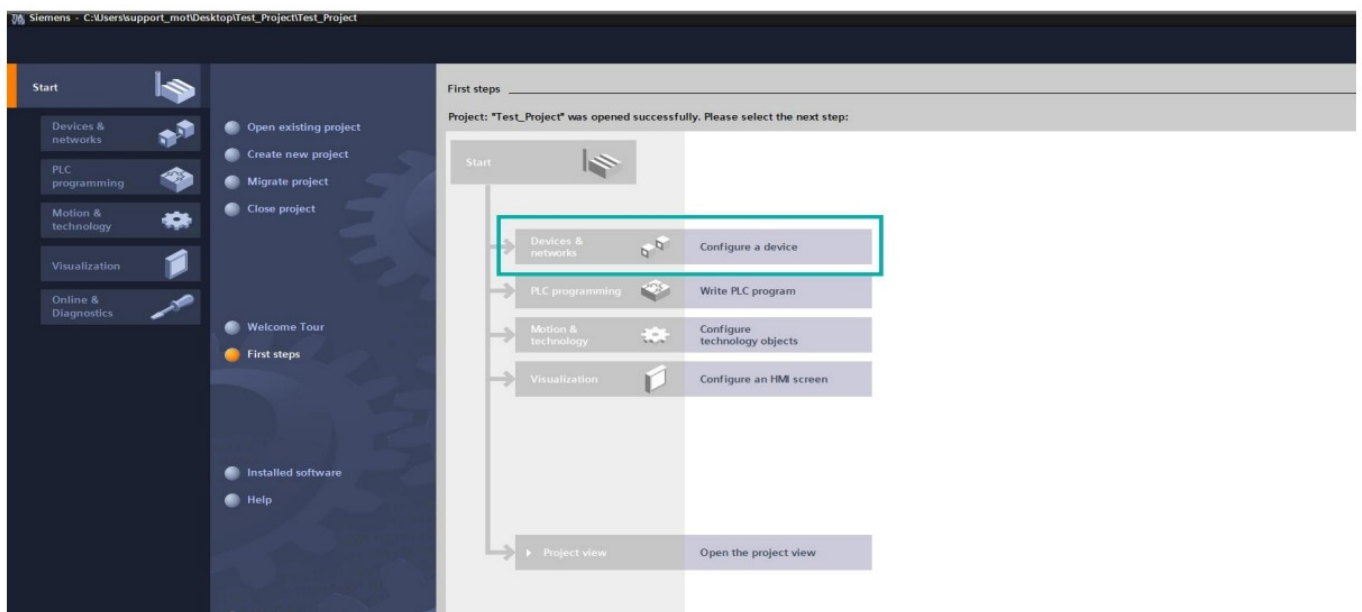
Monitoring and Preset Value Setup

1. Monitor Values using Watch and force tables
2. Add addresses for position and velocity monitoring
3. Set Preset values for control and monitoring

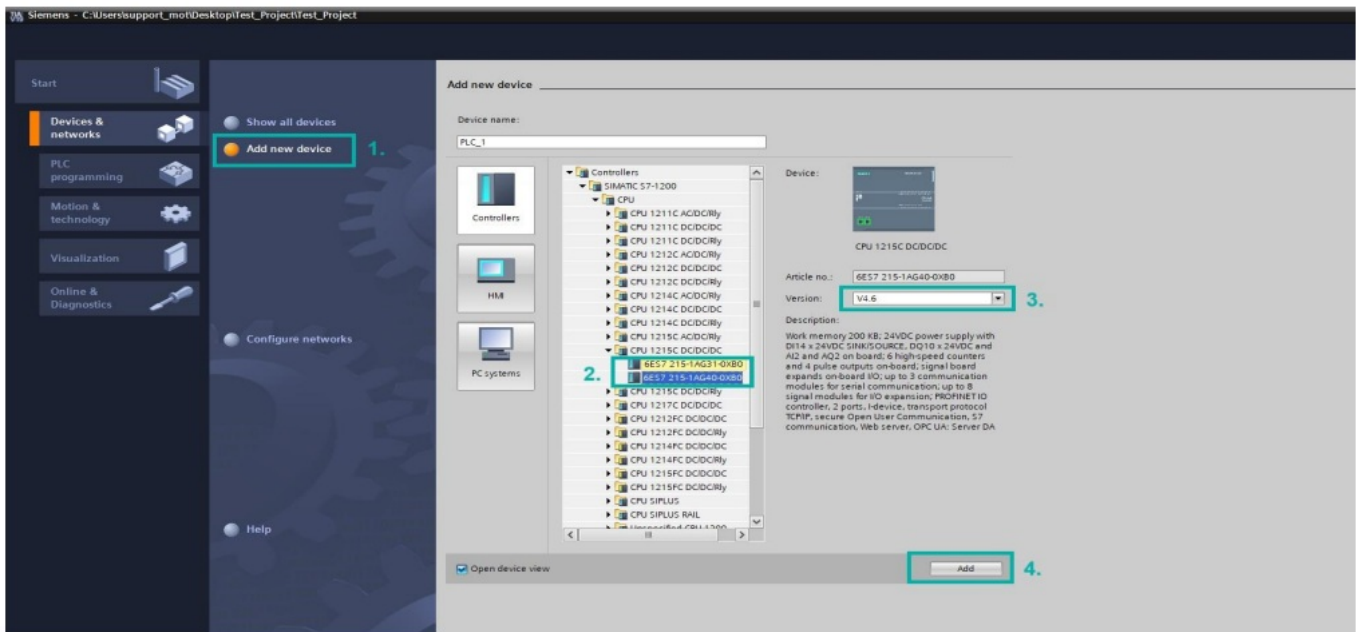
Create a New Project



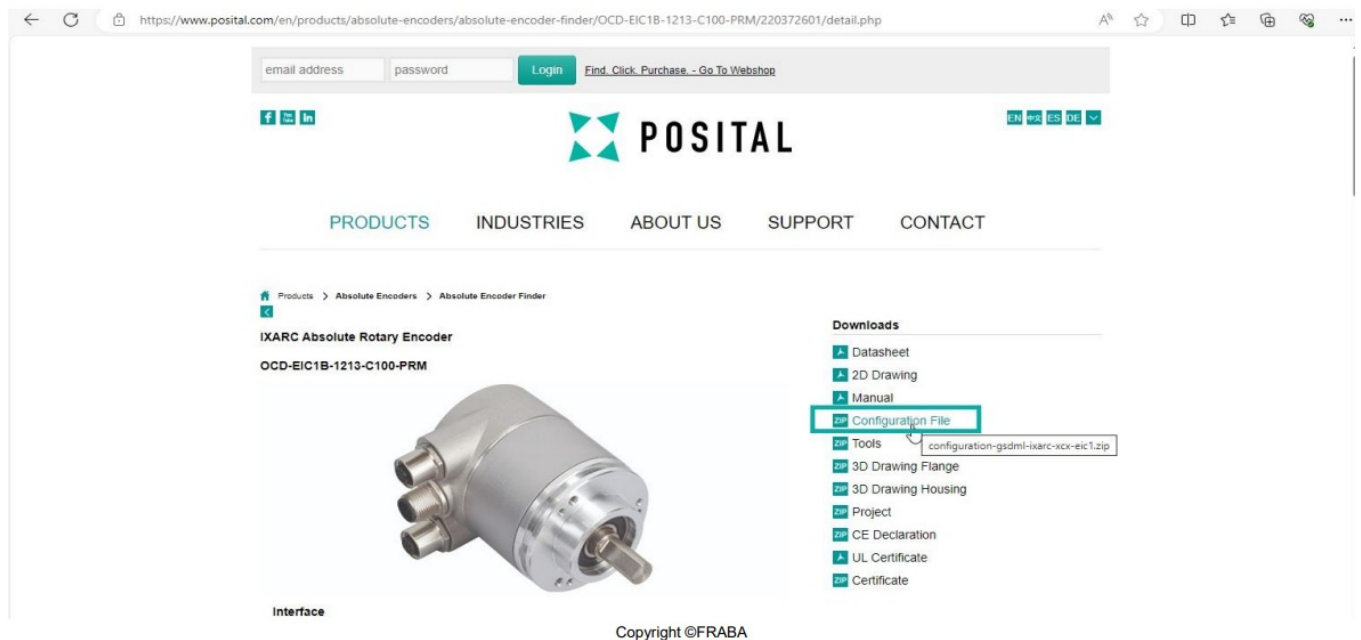
Configure a Device



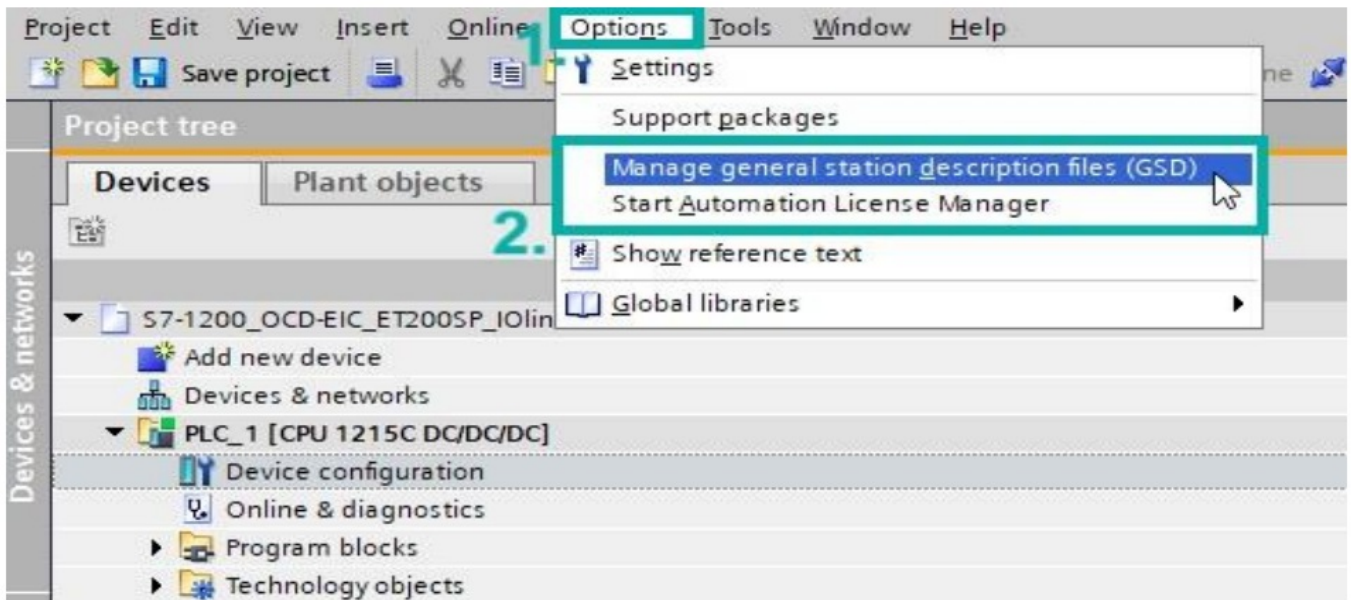
Add a PLC



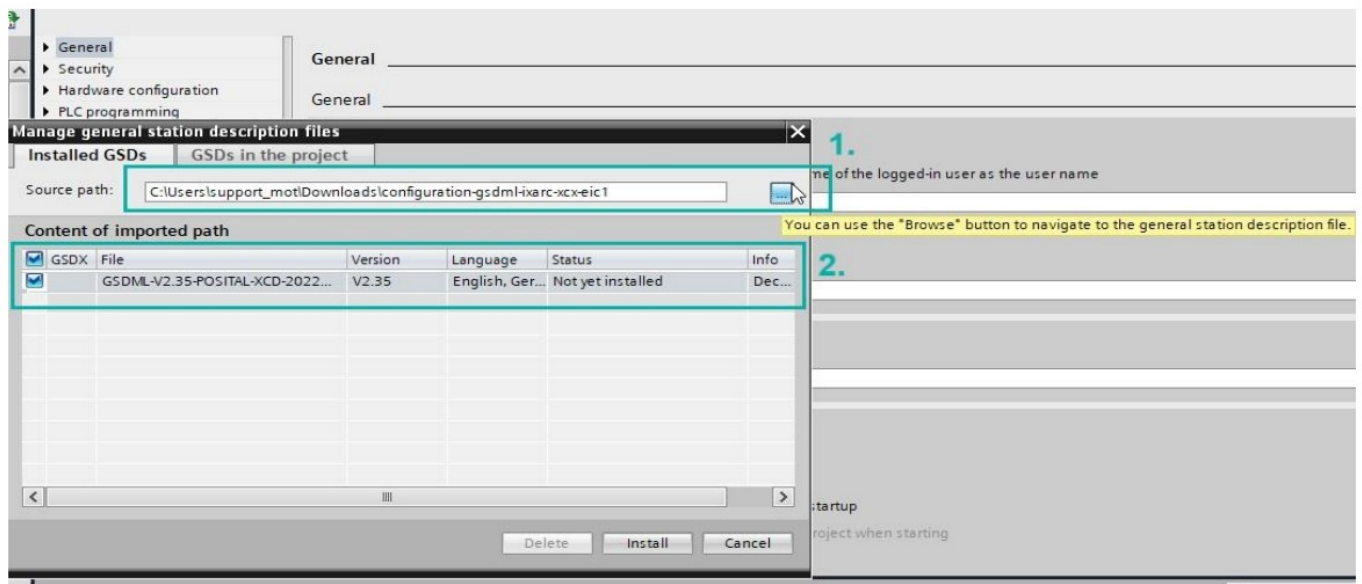
Download the correct GSDML File from our Website



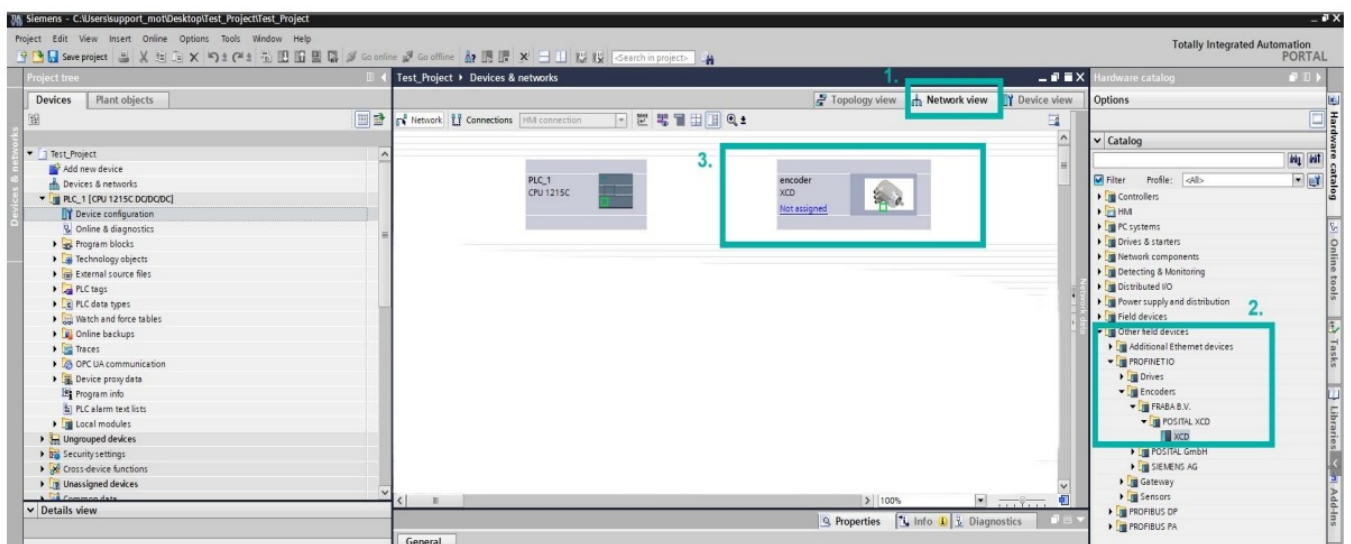
Add the GSDML File



Install the GSDML file

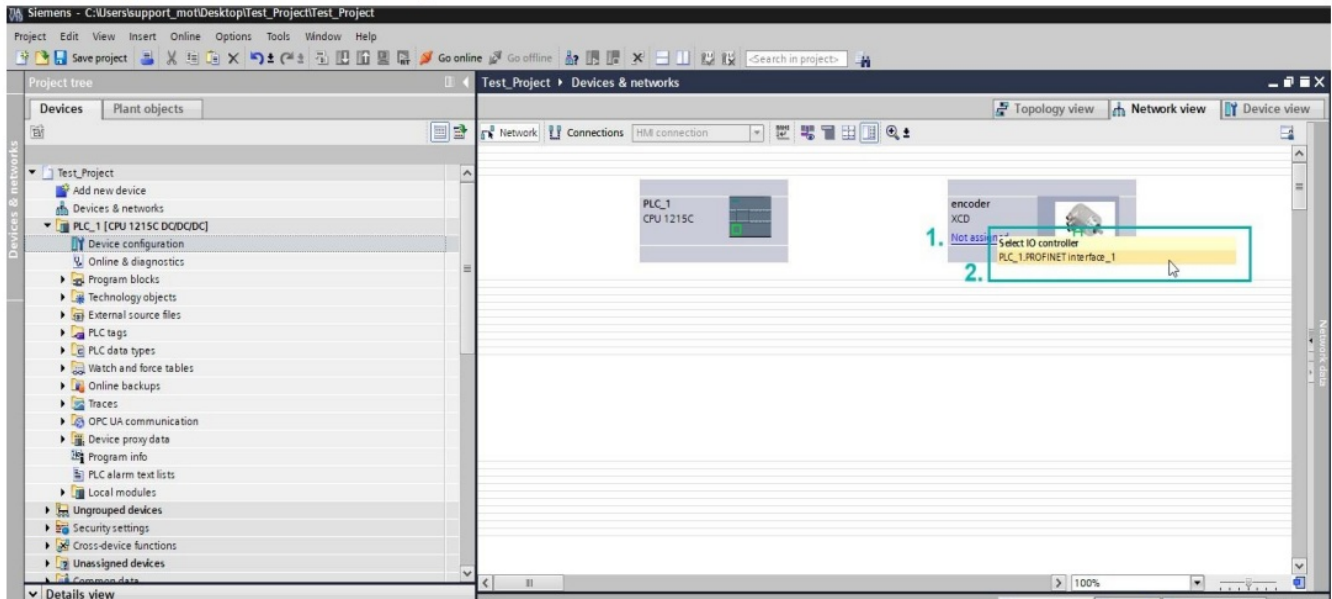


Add the Encoder



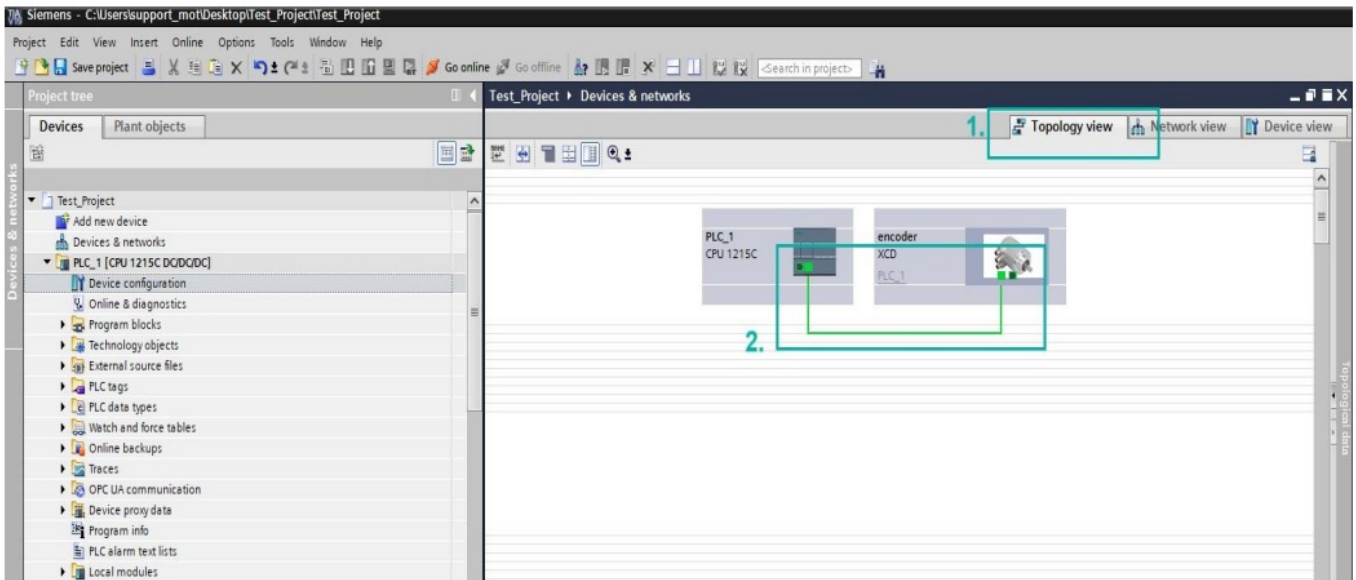
Assign the Encoder

1. Click on Not Assigned in the encoder frame
2. Assign it to the corresponding PLC

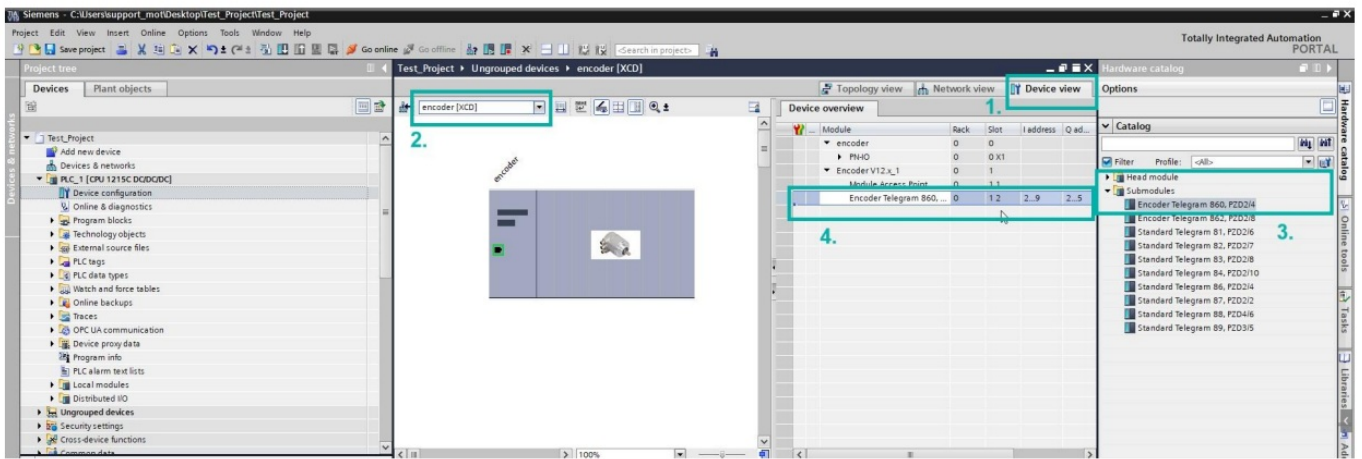


Establish the Connection

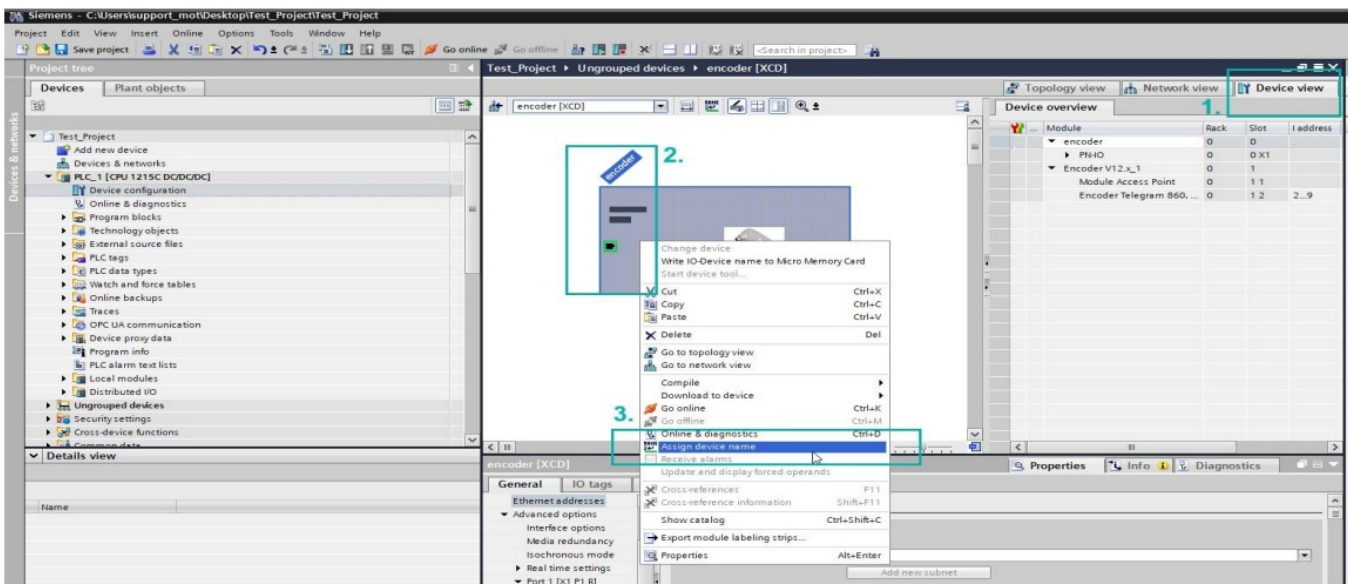
Important: The connection must correspond with the onsite cable connection of your system.



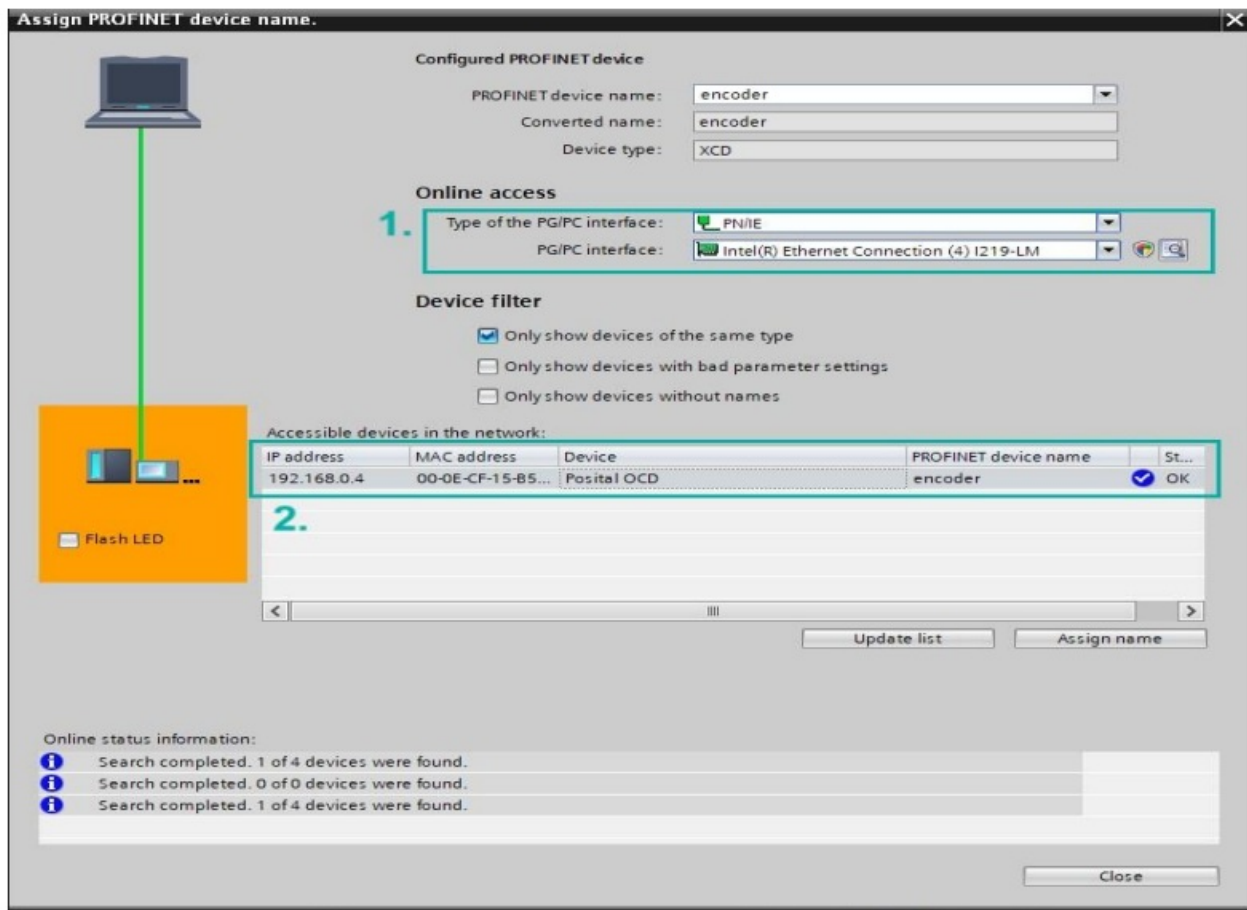
Choose the Telegram



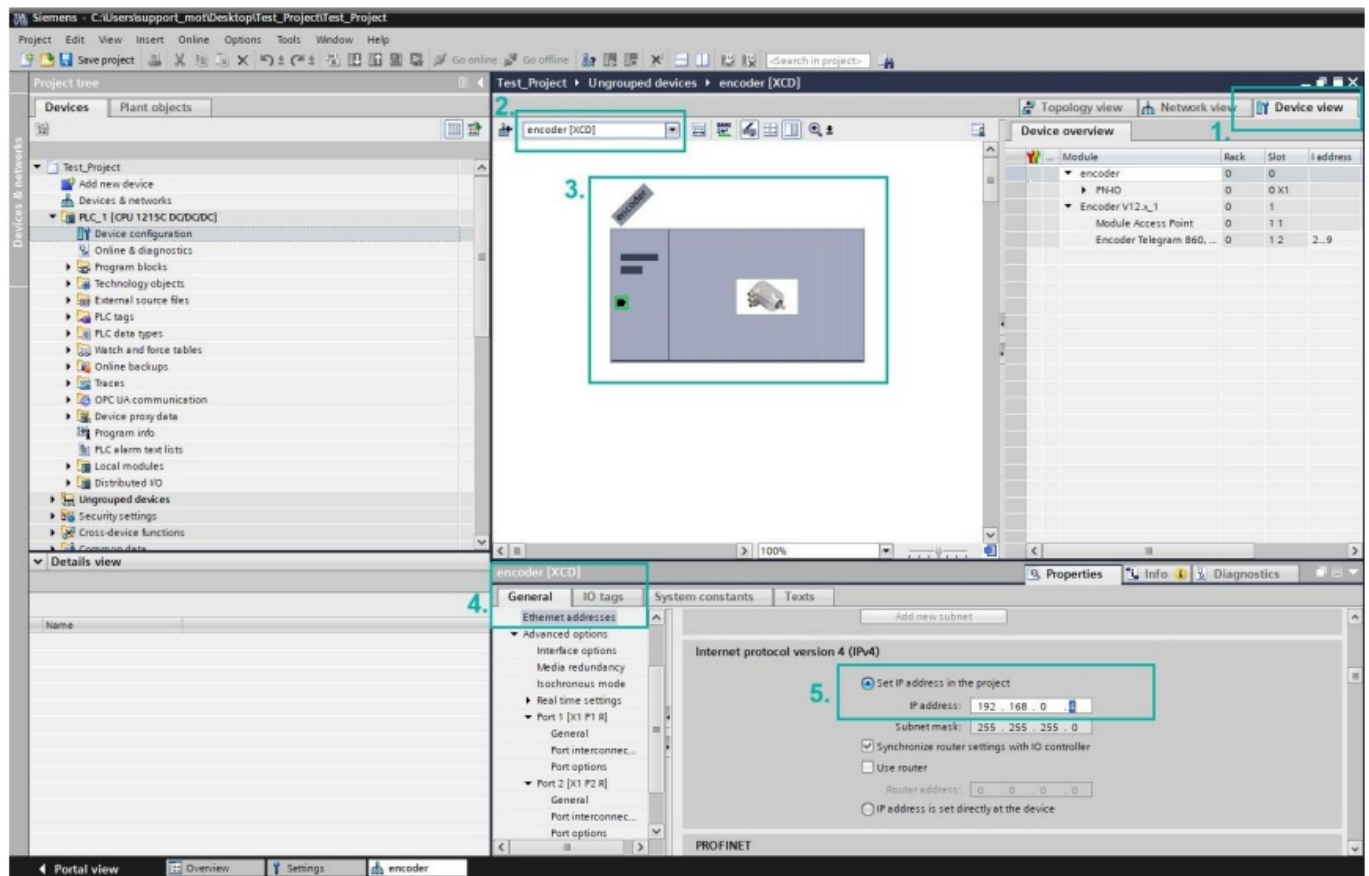
Assign Device Name



Select the encoder to be assigned

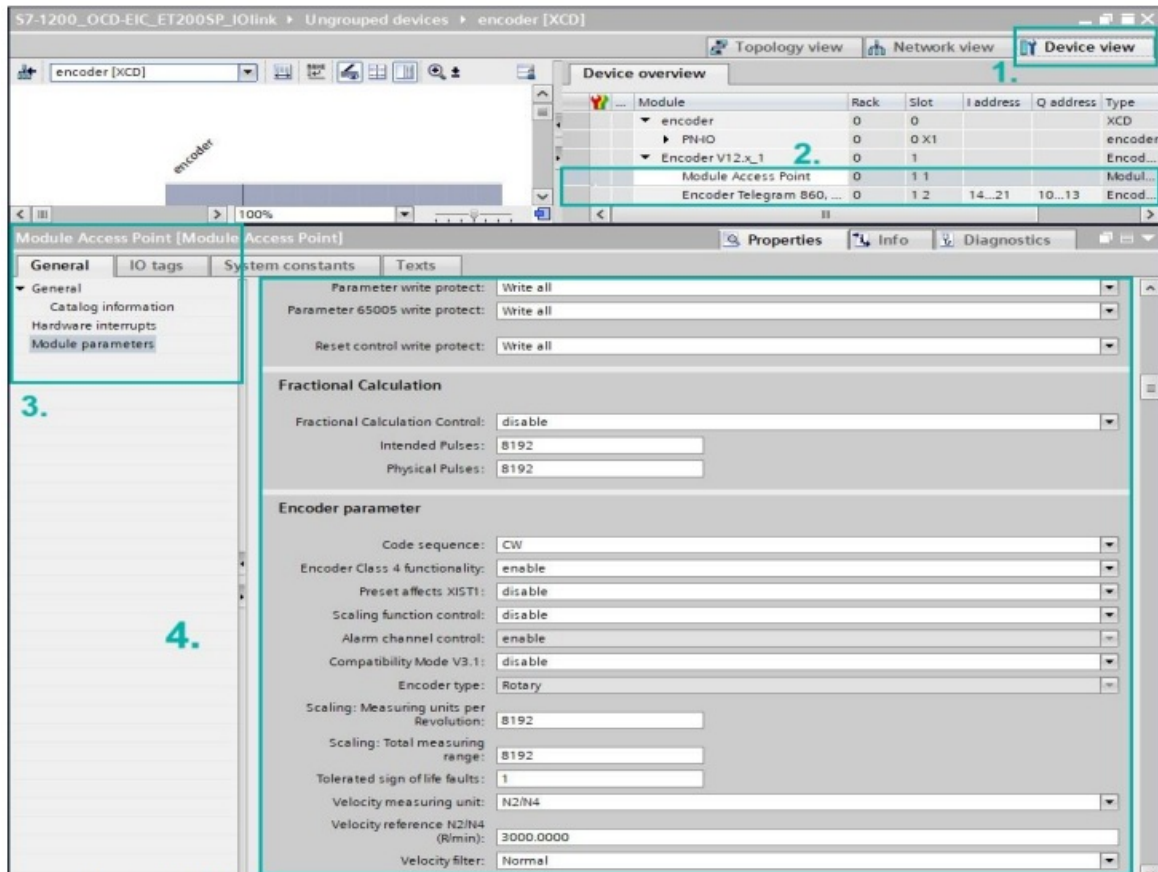


Set the IP address of the Encoder



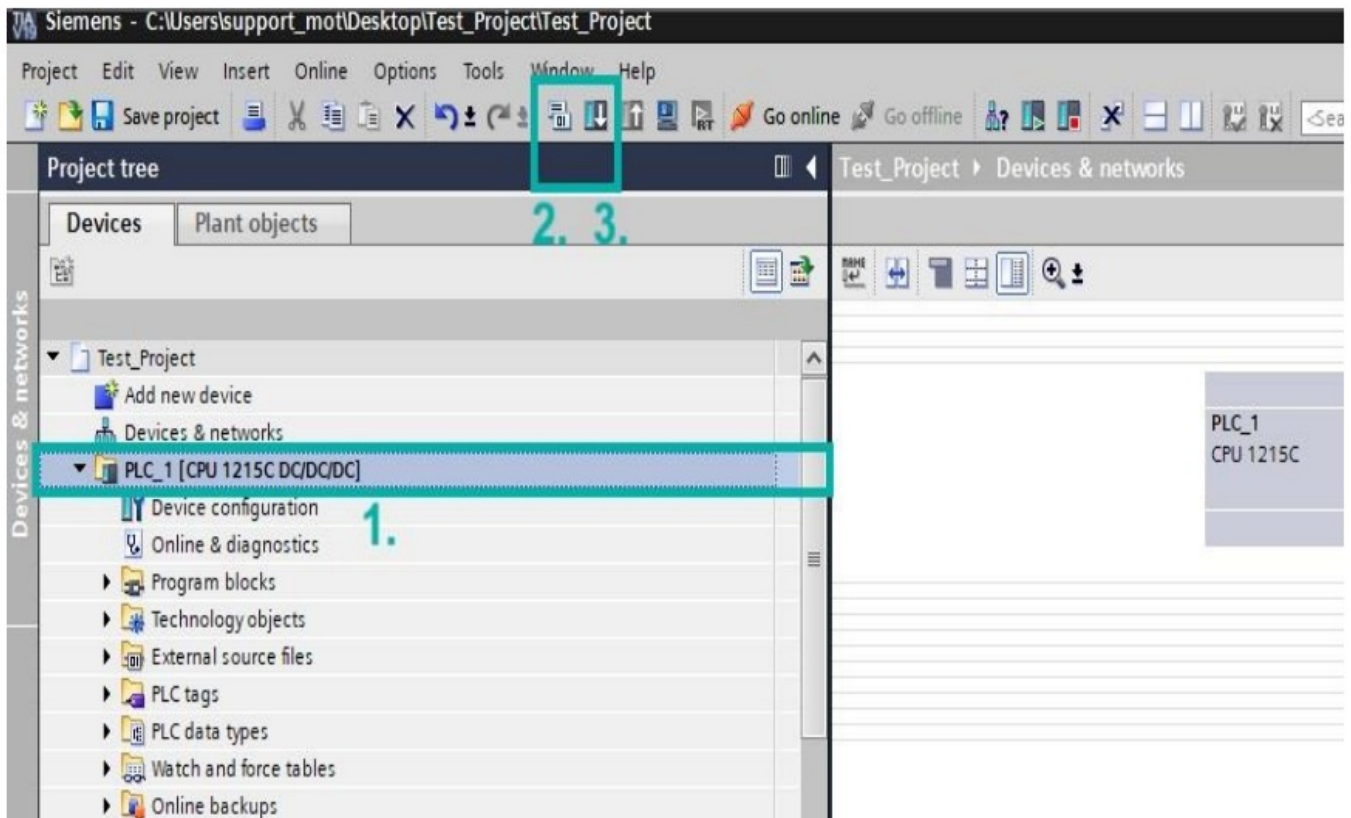
Multiple parameters can be configured in Module Access Point

You can configure several parameters you need: Measuring units per revolution, Total measuring range, etc.



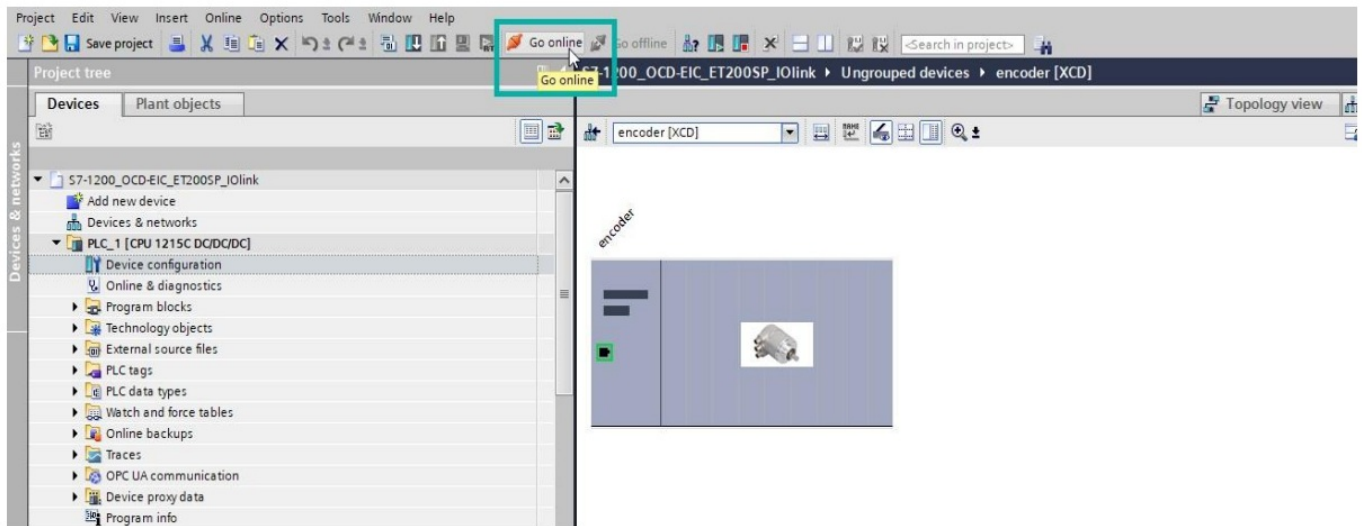
Copyright ©FRABA

Compile and Download the Project



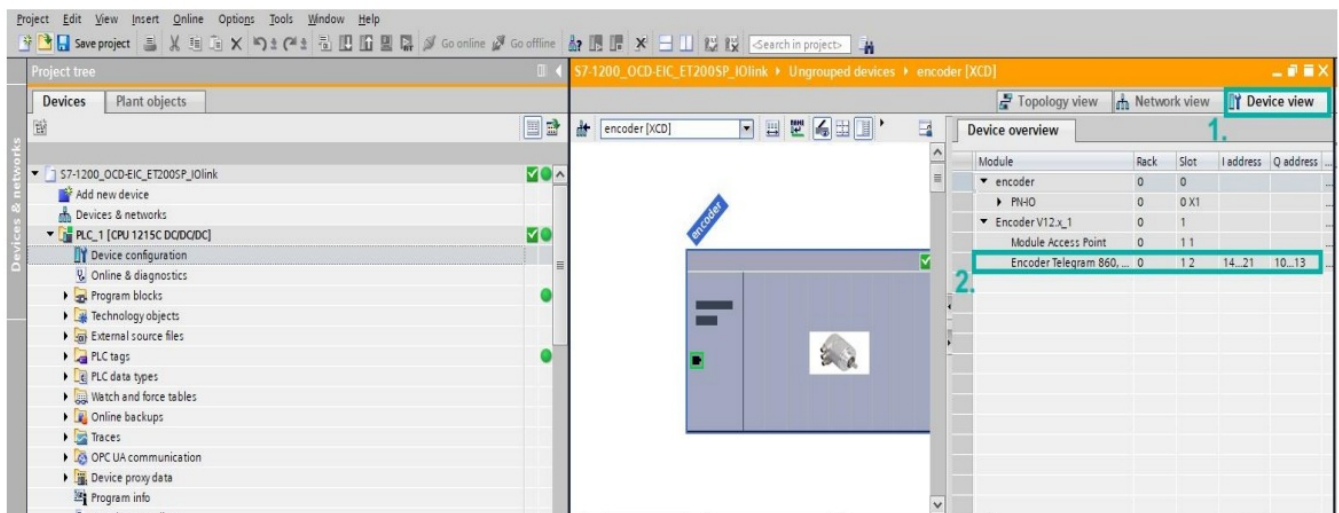
Copyright ©FRABA

Go Online



Check the IO Addresses in the Telegram

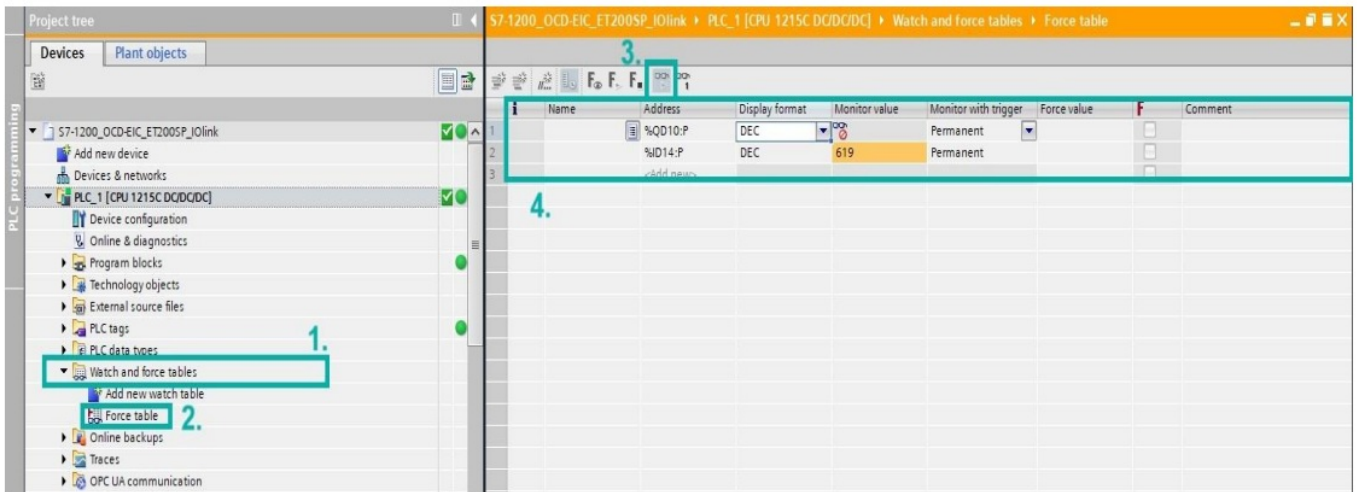
Important: Pay attention to the I/O addresses. You need them later when the position values are monitored.



Monitor Values

1. Use the Watch and force tables to monitor values
2. Go to Force table
3. Click on Monitor Values
4. In a free row add the address: “%ID14” to monitor position value

Important: The value in blue depends on the chosen Telegram (here Telegram 860). Check the manual for more information.



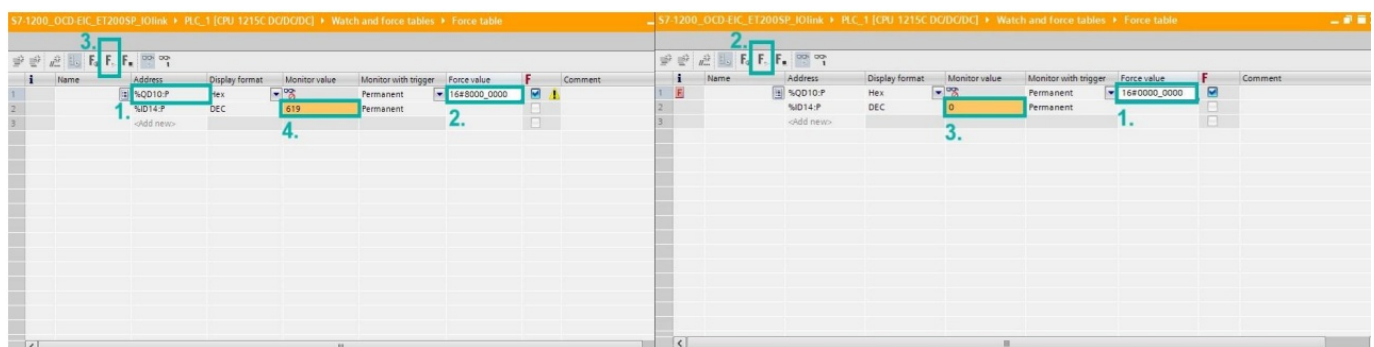
Preset Value

1. In a free row add the address: “%QD10” for preset position value
2. Add the desired value(Bit 31 is set to “1” for Preset Control)
3. Click on Force

Important: The value in blue depends on the chosen Telegram (here given for Telegram 860).

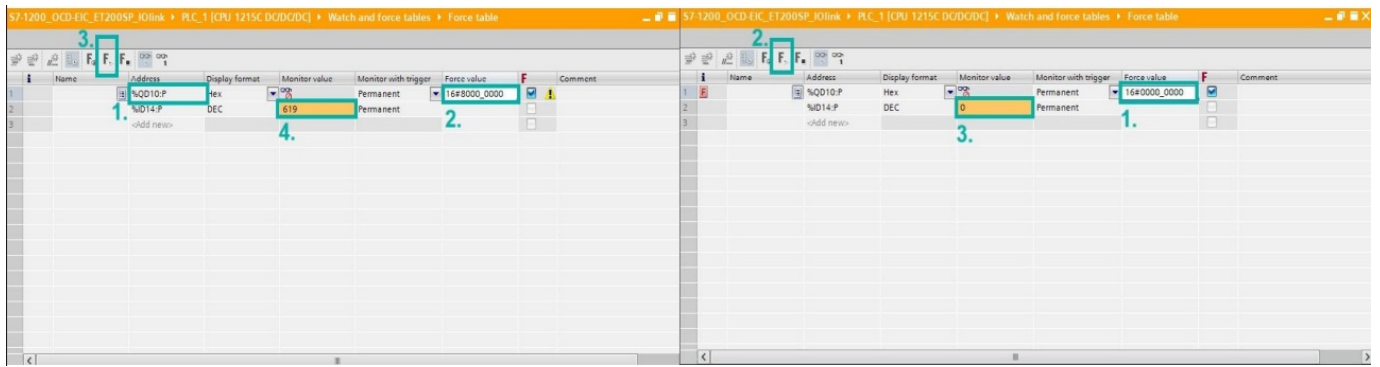
1. Save the Preset: Bit 31 is set back to “0” for saving the preset
2. Click on Force
3. Now the Preset is set to “0”

Now Values in cell 1 and cell 3 are equal. Value from cell 1 was “forced” in cell 3



Preset Value – Explanation

The way of defining the preset value: Preset Control: Bit 31 must be set the to “1” In HEX it is: 16#8000_0000
In BIN it is: 2#1000_0000_0000_0000_0000_0000_0000_0000

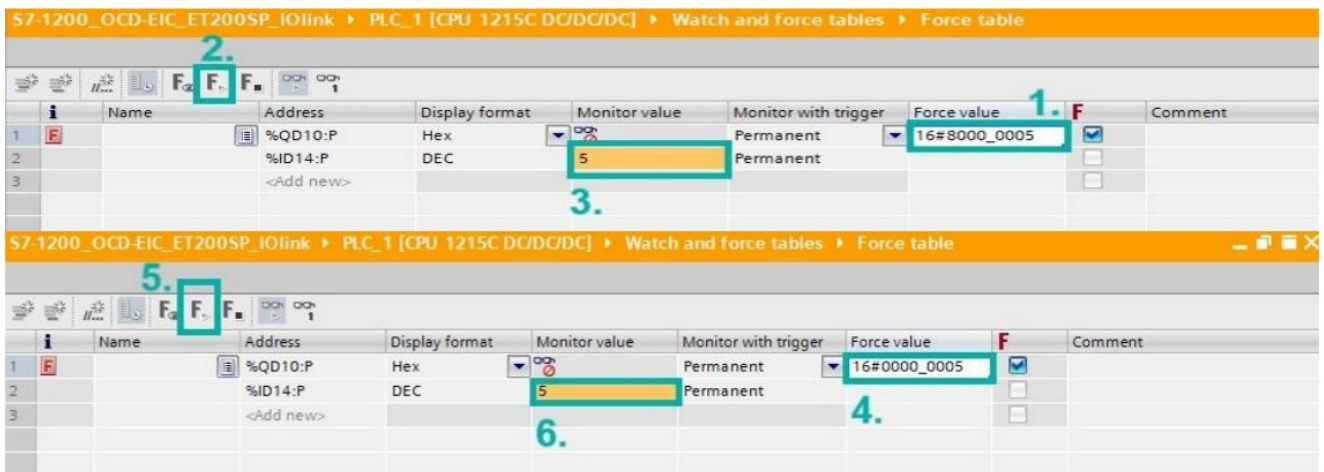


We recommend to use the Hexadecimal values. As it is shorter, it is less likely to lead to mistakes.

Important: For more information check “Preset Value” chapter in the manual

Example: Set the Preset to “5”

1. In cell 1 preset control is active (31 bit is set to “1” HEX: 16#8000_0000) and the desired value is set: “5”
2. Click on Force
3. The value is set to 5
4. Save the Preset: 31 bit back to “0”
5. Click on Force
6. The value is set and saved to 5



Monitor the Velocity

1. Add the Address for the Velocity : ID18 (ID14 +4) in that case
2. When moving the shaft, the velocity is monitored

S7-1200_OCD-EIC_ET200SP_IOlink ▶ PLC_1 [CPU 1215C DC/DC/DC] ▶ Watch and force tables ▶ Force table									
	Name	Address	Display format	Monitor value	Monitor with trigger	Force value	F	Comment	
1		%QD10:P	Hex	0	Permanent	16#0000_0005	<input checked="" type="checkbox"/>		
2		%ID14:P	DEC	5	Permanent		<input type="checkbox"/>		
3		%ID18:P	DEC	0	Permanent		<input type="checkbox"/>		
4		<Add new>					<input type="checkbox"/>		

1.


S7-1200_OCD-EIC_ET200SP_IOlink ▶ PLC_1 [CPU 1215C DC/DC/DC] ▶ Watch and force tables ▶ Force table									
	Name	Address	Display format	Monitor value	Monitor with trigger	Force value	F	Comment	
1		%QD10:P	Hex	0	Permanent	16#0000_0005	<input checked="" type="checkbox"/>		
2		%ID14:P	DEC	19725	Permanent		<input type="checkbox"/>		
3		%ID18:P	DEC	46449	Permanent		<input type="checkbox"/>		
4		<Add new>					<input type="checkbox"/>		

2.

Frequently Asked Questions

- **How do I monitor position values?**
 - To monitor position values, use the Watch and force tables. Add the address %ID14 to monitor position values.
- **How do I set and save a Preset value?**
 - To set and save a Preset value, add the address %QD10 with the desired value. Activate Preset Control by setting Bit 31 to 1.
Click on Force to save the Preset.
- **How do I monitor the Velocity?**
 - To monitor the Velocity, add the address ID18 (ID14 + 4) in the configuration. The velocity is monitored when moving the shaft.

Documents / Resources

	POSITAL IXARC Absolute Encoder With Profinet Interface [pdf] User Guide IXARC Absolute Encoder With Profinet Interface, IXARC, Absolute Encoder With Profinet Interf ace, Profinet Interface
---	---

References

- [User Manual](#)

Manuals+. Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.