

Physical PLC, Analog configuration, HMI setting

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November 2022, Chiang Rai, Thailand
(Updated 07/03/2023,
Updated 17/03/2023,
Updated 25/5/2023)

RUN/STOP PLC



Setting



Select
"STOP"



Config below:
• IP address
• Date & Time



Address

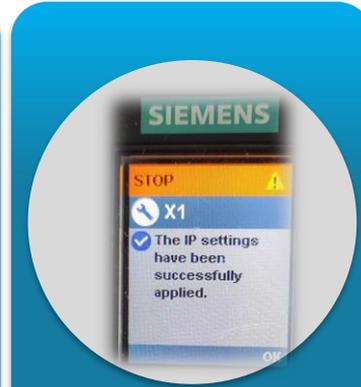


X1



X1 configuration

- IP address
- Assign IP address
- Subnet mark
- Router



Successfully
applied

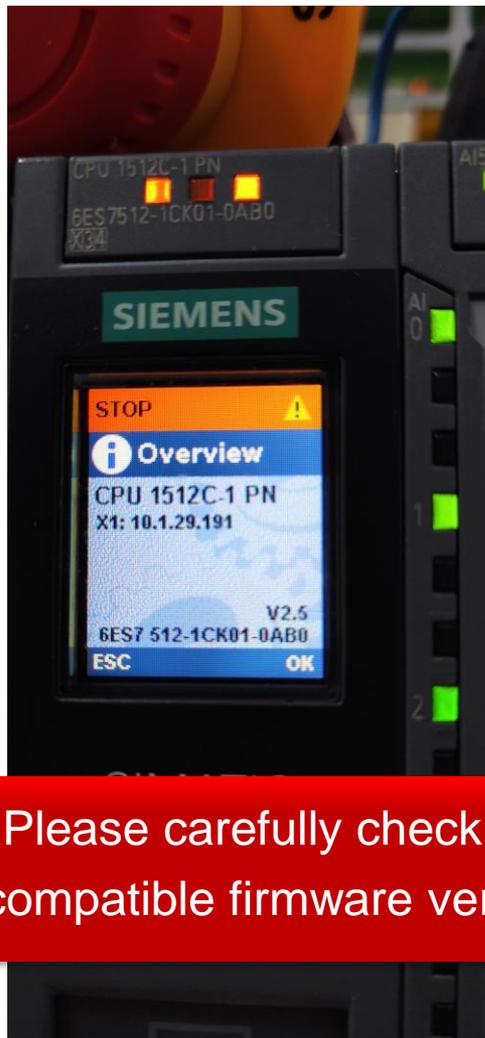


Date & Time

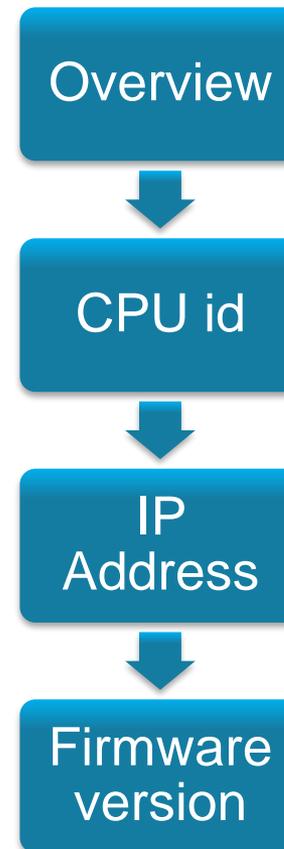
Please change the date and time
according to your local



Overview & Firmware version



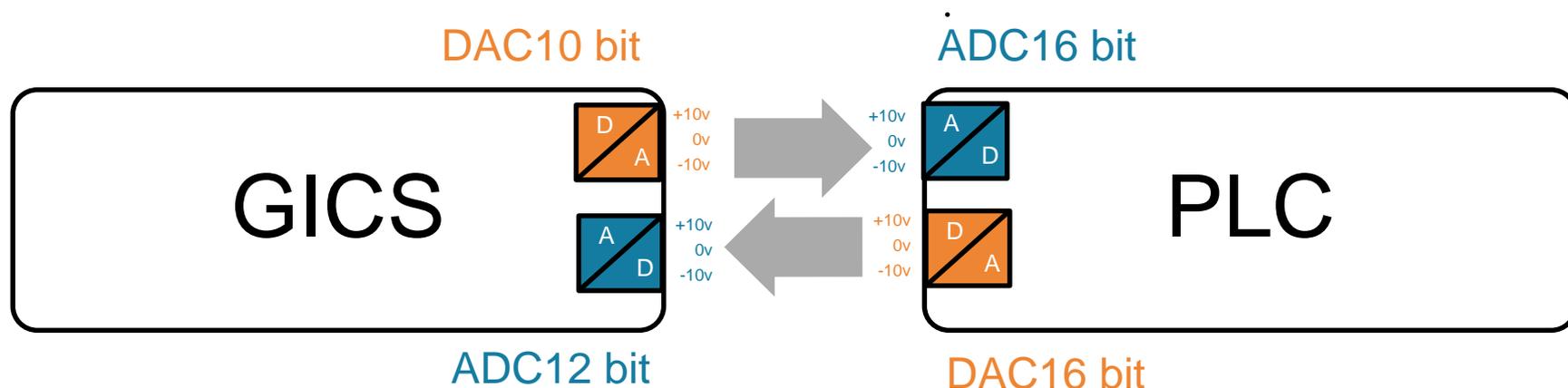
Please carefully check the
compatible firmware version



Analog configuration

November 2022, Chiang Rai, Thailand (Updated 25/05/2023)

Diagram of GICS and PLC



10 bits = 0 – 1023

12 bits = 0 – 4095

16 bits = 0 – 65535

Test on analog configuration

The screenshot displays the Siemens TIA Portal interface. On the left, the 'Devices & networks' tree shows the project structure. A configuration window for 'AI 5/AQ 2_1 [Module]' is open, showing a table of IO tags. The main workspace shows 'Network 1' with two sub-routines (SUB UInt) connected to the PLC's analog I/O modules.

AI 5/AQ 2_1 [Module]			
General		IO tags	System const
	Name	Type	Address
	In1	Int	%IW0
	In2	Int	%IW2
	In3	Int	%IW4
	In4	Int	%IW6
		Int	%IW8
	Out1	Int	%QW0
	Out2	Int	%QW2

Network 1:

The ladder logic network contains two sub-routines:

- Top SUB UInt:** EN and ENO are connected. IN1 and IN2 are inputs. OUT is connected to the variable `%QW0`, which is labeled as `"Out1"`.
- Bottom SUB UInt:** EN and ENO are connected. IN1 is connected to the variable `-26830 %IW2 "In2"`. IN2 is an input. OUT is connected to the variable `-26830 %QW2 "Out2"`.

Main ladder programming
on an analog I/O testing

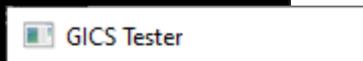
GICS Tester interface (output 0,512)



Target IP	10.1.29.194	Port	2015
AO1	0	AI1	2031
AO2	512	AI2	2047
AO3	512	AI3	0001
AO4	512	AI4	0293
AO5	512	AI5	2051
AO6	512	AI6	2051
AO7	512	AI7	2050
AO8	512	AI8	2052

I01 I02 I03 I04 I05 I06 I07 I08 I09 I10 I11 I12

Analog output 1 = 0
Analog input 3 = 0001
Analog input 4 = 0293



Target IP	10.1.29.194	Port	2015
AO1	512	AI1	2043
AO2	512	AI2	2050
AO3	512	AI3	1802
AO4	512	AI4	0294
AO5	512	AI5	2051
AO6	512	AI6	2055
AO7	512	AI7	2051
AO8	512	AI8	2052

I01 I02 I03 I04 I05 I06 I07 I08 I09 I10 I11 I12 I13 I14 I15 I16
O01 O02 O03 O04 O05 O06 O07 O08 O09 O10 O11 O12 O13 O14 O15 O16

Analog output 1 = 512
Analog input 3 = 1802
Analog input 4 = 0294

GICS Tester interface (output 1023,1025)

Analog output 1 = 1025
Analog input 3 = 0006
Analog input 4 = 0298

Overflow

Analog output 1 = 1023
Analog input 3 = 0201
Analog input 4 = 0298

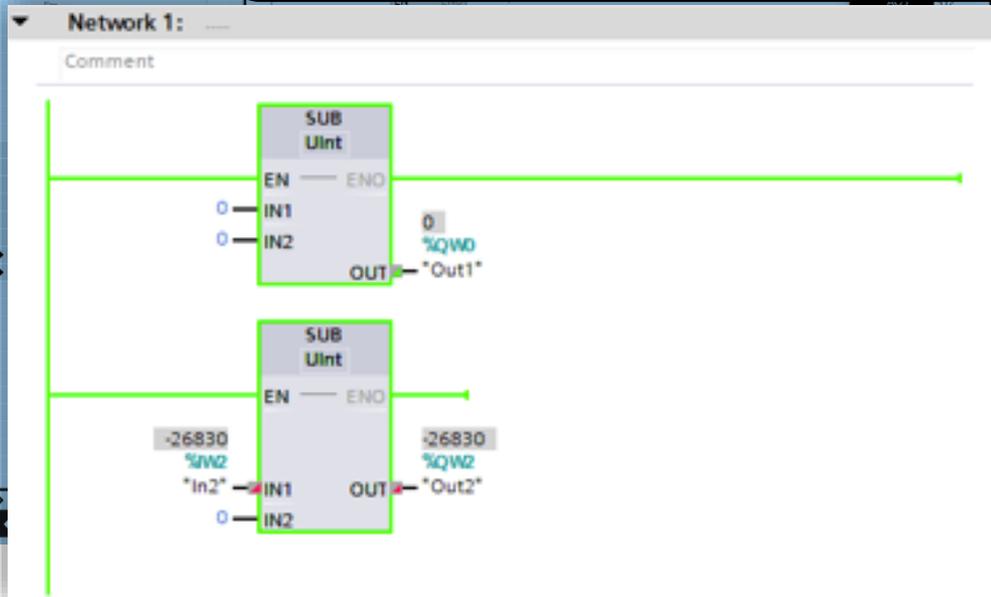
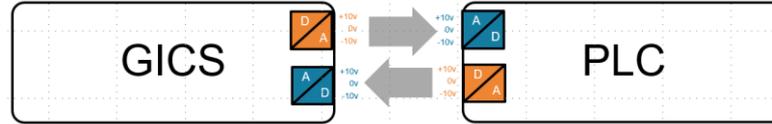
AO	AI
AO1	AI1
AO2	AI2
AO3	AI3
AO4	AI4
AO5	AI5
AO6	AI6
AO7	AI7
AO8	AI8

Target IP: 10.1.29.194 | Port: 2015

Status: █

Controlling 4 inputs PLC to GICS card are working well on the 2 analog output of PLC

Analog diagram



AI 5/AQ 2_1 [Module]

General		IO tags	System const
	Name	Type	Address
	In1	Int	%IW0
	In2	Int	%IW2
	In3	Int	%IW4
	In4	Int	%IW6
		Int	%IW8
	Out1	Int	%QW0
	Out2	Int	%QW2

HMI testing

February 28th , 2023, Grenoble, France



Créer un projet

Ajouter un appareil

Sélectionner l'HMI

Important

- SIMATIC Comfort Panel
- Screen 7"
- TP700 Comfort
- 6AV2 124-0GC01-0AX0

- Check a version of
firmware (V17)

HMI device setting for IP Address

