ANC-100e and ANC-120e Ethernet and USB to DH+ Converter



MatrikonOPC Server for Allen Bradley PLCs with ANC-100e using HMI feature on a Data Highway Plus network

This document provides information to set up MatrikonOPC Server for Allen Bradley PLCs running in a computer connected via Ethernet Network with an ANC-100e to communicate with a SLC5/04 or PLC5 processor on a Data Highway Plus Network using the HMI feature.

Note: Before proceeding, make sure

- ✓ ANC-120e Driver is installed (Only if using ANC-120e)
- ✓ Network Adapter is correctly configured to access ANC-120e or ANC-100e
- ✓ ANC-120e is connected to the computer and DH+ network or ANC-100e is connected to the same Ethernet network or directly to your computer, and to the DH+ network.

For this example:

ANC-100e IP address = 192.168.0.230 SLC5/04 DH+ node = 03

- 1. Turn ON the first row in the ANC-100e's "HMI" tab in the web interface
- Enter an IP address that is not being used (keep in mind that it has to be in the same network the ANC-100e is) and enter the DH+ node of the device that you are connecting to

Automation Networks

 You can repeat steps 1 and 2 for each row to communicate with up to 5 DH+ devices if necessary, using a different IP address in each row Click "Apply" and wait for the unit to reboot (5 seconds)



4. Open "MatrikonOPC Server for Allen Bradley PLCs" application

5. Click in "New Node icon" and select "Allen Bradley via Ethernet/IP"



6. Enter a name for the new node (*"Allen Bradley via Ethernet/IP"* for our example) and enter the IP Address you wrote in the HMI tab web configuration of the ANC (*"192.168.0.231" in our case*). the description will be filled automatically once you create the node

Allen Bradley via Ethernet/IP Configuration	
Name: Allen Bradley via Ethemet/IP 1 Description: 3	Enabled 🔽
Device Settings	
 Hostname localhost Connection Type: Control/CompactLogix ✓ or IP Address Select to identify the device by its IP address 	
Communication Settings	
Reply Timeout: 500 (msec) Reconnect Delay: 2,000 (msec)	
Automatic Configuration *	
Auto-Configure Devices	
* Automatic configuration begins on Create.	

7. Select the *Connection Type…* We have a SLC 5/04 so we selected: "*PLC5/xxE or SLC 505*" and click the "*Create*" button

Device Settings			
 ◯ Hostname or ○ IP Address 192.168.0.231 	Connection Type: Slot Number:	Control/CompactLogix Control/CompactLogix PLC5/xxE or SLC 505 Direc MicroLogix or 1761 PowerFlex	1
Cre <u>a</u> te 2			

8. If the PLC has a name it will be filled automatically. Change the PLC node number to the one configured in the HMI tab web configuration (*"3" in our case)* and click *"Apply"*

Description	: Allen Bradley PLC				
Device Settings					
Device Type:	SLC 504	V PLC Nod	e Number: 0	÷	
Communication Set	tings			4	
Detect Fault E	very 2	,000 ≑	msec		
Detect Program	n Mode Change Every 1	00 🖨	msec		
Reconnect Del	ay 1	0,000 🖨	msec		
PLC Configuration F	File (MTK,PC5)				
.\Allen-Bradley-via	-Ethemet-IP_DLTG04B.I	МТК			
Re-Read Confi	iguration from PLC * R	e-read configur	ation begins on	Apply.	
	fully updated control ta	g file.			

9. Open *MatrikonOPC Explorer* to connect to the OPC Server and start working with your PLC (*adding TAGS for example*). Search for the OPC Server Name



10. Select "Connect..." and then "Add Tags..."



11. In the new window select "Allen Bradley via Ethernet/IP" and search within the PLC (*"DLTG04B"*) for the TAG or TAGs you are going to work with. In our case is N7:0, and the value is 56.

🚵 MatrikonOPC Explorer (Group0)	?	×
File Edit View Browse		
😽 🦉 🗙 💼 🍋 🖻 😅		
Tag Entry Tags to be added:		
Item ID: Data Type: Empty/Default		
Access Path:		
Eilter: Data Type Filter: Empty/Default Write Access Read Access Branches Items		
Available Items in Server 'Matrikon.OPC.AllenBradleyPLCs.1':		
✓ Allen Bradley via Ethernet/IP 1 ✓ Image: Constraint of the second secon		
> - F8 > - N10		X

12. Select the item *"N7"* and then select the tag *"0.VALUE"* and click on the arrow button to add the *TAG*. Click *"OK"* button.

Tag Entry Item ID: Allen Bradley via Ethernet/IP:DLTGC	Tags to be added:
Data Type: Empty/Default ✓ Create Active Access Path:	via Etherne
Eilter: Data Type Filter: Empty/Default Write Access Read Access Branches Ite	ms
Available Items in Server 'Matrikon OPC AllenBradlevPI Cs. 1'	
Available items in server Matrikon. OPC., Allehor auleyptics, 1: ~ 0 N20 ~ 0 N32 ~ 0 R6 ~ 0 S2 ~ 0 T4	
Configured Aliases	
	-
🚥 Available Tags	^
1000.VALUE	
1.VALUE	
10.VALUE	
100.VALUE	
	~
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13. If everything is correct you will see the value of the TAG. In our example "56"

