Technical Documentation



VISY-X

MOXA Ethernet Converter Installation and configuration



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1 Hardware Installation





Connect the MOXA Ethernet Converter with:

- (1) Network cable
- (2) Power plug
- (3) Serial cable for connection with Service-Interface or Host-Interface of the VISY-Command



If connected to the Service-Interface: set DIP-Switch "S1: Service" on the VI-Board (see the technical documentation of VISY-Command)

S

If connected to the Host-Interface: set the Host-Code with the VISY-Setup software (see the technical documentation of VISY-Setup)



Check the connection cables if no data can be received

(4) Connect the network cable with network port or router



A direct connection with a PC or Laptop during the configurations process is also possible. When the configuration is done it has to be connected to a network connector or a router.

(5) Ask your system administrator for an IP address and network mask



2 Software installation

- (1) Install and run the program "NPort Administrator" from the MOXA CD
- (2) Select "Configuration" (1)
- (3) Click on "Search" (2)

🔹 NPort Administrator-	Configuratio	n					
<u>File Function Configuration View H</u> elp							
Exit Search IP Locate Configure Web							
Function	Function Configuration - 1 NPort(s)						
- NPort 1	No 🛆	Model	MAC Address	IP Address	Server Name	Status	
Configuration Monitor Port Monitor COM Mapping		NPort 5110	00:90:E8:1C:F6:A9	192.168.127.254	NP5110_9255		
	<					>	
Message Log - 1 Monitor Log - 0							
No Time	1	Description					
1 29.04.2010 11:52:35 Found NPort(s): 1							
2 Name 20:04 2010 11:52:26							

Figure 2: NPort configuration list



- (4) The MOXA Ethernet Converter has a pre-set IP address: 192.168.127.254
- (5) Select "NPort 5110" from list (here No. 1) and confirm with "Configure".

🐝 NPort Administrator-	Configuratio	n				
<u>File Function Configuration View Help</u>						
Exit Search Search	业 IP Locate	Configure Web				
Function			Configuration -	1 NPort(s)		
⊡ NPort	No 🛆	Model	MAC Address	IP Address	Server Name	Status
Configuration Monitor Port Monitor COM Mapping York IP Address Report		NPort 5110	00:90:E8:1C:F6:A9	192.168.127.254	NP5110_9255	
	<					>
Message Log - 1 Monitor Log - 0						
No Time Description						
1 29.04.2010 11:52:35 Found NPort(s): 1						
Nouse 20.04.2010.11+52+36						

Figure 3: NPort configuration selection



(6) Choose the tab "Network"

IP address: check "Modify" enter the IP address your system administrator supported you with

Netmask (preset: 255.255.255.0) check "Modify" enter the netmask your system administrator supported you with

Confirm the configuration with a click on "OK"

🐝 N	Port Administrator-Config	uration 📕 🗖 🗖
<u>F</u> ile	Eunction Configuration View	/ <u>H</u> elp
	Configuration	
]	Information Model Name NPort 5110	Accessible IPs Auto Warning IP Address Report Password Basic Network Serial Operating Mode tus
	MAC Address 00:90:E8:1C:F6:A9	IP Address 192.40.60.238
	Serial Number 9255	Modify Netmask 255.255.0 Gateway
	Firmware Version Ver 2.2	IP Configuration Static - DNS Server 1
	System Uptime 0 days, 00h:03m:52s	DNS Server 2
		Community Mana
Mes		
No		Contact
		Click the "Modify" check box to modify configuration
) Now: 1	29.04.2010 11:54:23	

Figure 4: NPort configuration IP address



(7) Type the IP address in the Internet-Browser (PC has to be connected to the same network).



Figure 5: MOXA online connection

Then the NPort's web console opens:

De NPort Web Console - Mozilla Firefox					
Datei Bearbeiten Ansicht Chronik Lesezeichen	E <u>x</u> tras <u>H</u> ife				
C × A http://192.40.	60.238/	→ 👻 🚱 Google	S.		
📄 FAFNIR GmbH - Senso 🏠 Horde :: Horde Anmel	🚼 Google Übersetzer				
NPort Web Console ÷			-		
	www.mo	xa.com			
Overview	Welcome to NPON				
Basic Settings	Model Name	NPort 5110	-		
Network Settings	MAC Address	00:90:E8:1C:F6:A9	-		
🖻 🔄 Serial Settings	Serial No.	9255	-		
Port 1	Firmware Version	2.2 Build 08042219	-		
Operating Settings	System Uptime	0 days, 00h:00m:04s			
Cont 1 Cont 1 Accessible IP Settings	NPort's web console provide the following function groups.				
Auto Warning Settings Monitor	Basic Settings Server name, real time clock, time server IP address, and Web console, Telnet console				
 Change Password Load Factory Default Save/Restart Betwork Settings IP address, netmask, default gateway, static IP or dynamic IP, DNS, SNMP, IP location report. 					
Serial Settings Baud rate, start bits, data bits, stop bits, flow control, UART FIFO. Operating Settings Operation mode, TCP alive check, inactivity, delimiters, force transmit timeout. Accessible IP Settings					
Fertig					

Figure 6: MOXA bowser



(8) Select "Serial Settings - Port 1" within the main menu and enter the following values

Baud Rate:	9600
Data bits:	8
Stop bits:	1
Parity:	None
Flow control:	None

Confirm the configuration with a click on "Submit"



Figure 7: Configuration of the serial connection



(9) Select "Operating Settings - Port 1" within the main menu and enter the following values: Operation Mode: TCP Server Mode

The "Local TCP Port" is equal to the port number of VISY-Setup!

Confirm the configuration with a click on "Submit"

NPort Web Console - Mozilla Firefox						
FAFNIR GmbH - Senso A Horde :: Horde Anmel	Soogle Übersetzer					
📄 NPort Web Console 🛛 🔶						
MOXA	www.mo	xa.com				
🔁 Main Menu	Operating Settings					
🗀 Overview		Port 1				
Basic Settings	Operation mode					
Network Settings	TCP alive check time	7 (0 - 99 min)				
Derating Settings	Inactivity time	0 (0 - 65535 ms)				
L Port 1	Max connection					
🗀 Accessible IP Settings	Ignore jammed IP	● No ○Yes				
🗉 🚞 Auto Warning Settings	Allow driver control	● No ○Yes				
🖻 🦲 Monitor		Data Packing				
🗀 Change Password	Packing length	0 (0 - 1024)				
Load Factory Default	Delimiter 1	0 (Hex) Enable				
Save/Restart	Delimiter 2	0 (Hex) Enable				
	Delimiter process	Do Nothing V (Processed only when Packing length is 0)				
	Force transmit	0 (0 - 65535 ms)				
	TCP Server Mode					
	Local TCP port	4001				
	Command port	966				
Submit						

Figure 8: Configuration operating mode

- (10) Select Save/Restart within the main menu
- (11) (A) Disconnect the MOXA if it is connected directly to the PC and connect it with the router.

(B) If the MOXA is directly connected to a router, the configuration has to be proceeded (e.g. port forwarding).



3 Testing

(1) VISY-Setup is a useful tool to check the connection. For that purpose the MOXA has to be connected to the Service-Interface of the VISY-Command and the DIP-Switch S1 has to be set to OFF - OFF.

Select the tab "Network Connection" and type in IP address und port number.

By clicking on "Connect" the VISY-Setup program opens.

🐱 VISY-Setup	4.1.1		
Network Conner Use this option service interfac is connected to TCP/IP convert	ction : when the RS-232 e of the VISY-Command a network over a :er.	FA	FNIR
Serial Connection	Network Connection Mo	dem Connection Virtua	al Device
	Hostname / IP-Address : Port number :	192.40.60.238 4001	
🥂 🥂 🏹 🖉 Langu	ages	Connect	Close

Figure 9: VISY-Setup network connection

(2) Installation complete!



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