MCM TCP/IP NETWORK QUICK INSTALLATION GUIDE

MCM Networks can be connected to local area networks or the internet for remote monitoring.

This step-by-step guide includes all the steps to connect one or multiple MCM Networks to a TCP/IP network.

You can refer to the MCM RS485/RS422 Quick Installation Guide for information on how to create a MCM Network.

1. OVERVIEW OF MCM TCP/IP NETWORK

A MCM Network can be connected to a PC using a RS485/RS232 Converter or to a wider TCP/IP network using a RS485/TCP/IP Converter units.

RS485/RS232 Converter enables a PC to connect to a MCM Network using a PC standart RS232 connection.

MOXA, a RS485/TCP/IP Converter, functions as a bridge between a RS485 network and a TCP/IP network by acting as a TCP/IP server and a RS485 host at the same time. It is possible to connect MCM Networks to local intranet and internet using MOXA units.

NOTE: Each MCM unit on the same network must have a unique address to function properly!

2. SETUP

2.1. Initial Steps

MOXA unit included in your delivery will be used to create the network. Make sure the steps below are finished **before** you start a MCM TCP/IP Network setup:

- 1. MCM Quick Installation Guide for each MCM in your application.
- MCM RS485/RS422 Network Quick Installation Guide for each MCM Network in your application.
- MOXA Quick Installation Guide included inside the MOXA package. Note that there are two connection types:
 - If you are using a RS232/RS485 Converter in a MCM Network, the DIP Switch position will be OFF / OFF / OFF.
 - If you are using MOXA directly, the DIP Switch position will be OFF / OFF / ON.
- MCMSCADA setup for the PC that you wish to act as a Main Node (HOST) for your application.

2.2. Setting up a MCM TCP/IP Network

Follow the steps below to create a MCM TCP/IP Network:

- If the MOXA unit is directly connected to the PC, use a crossover network cable to connect it to the PC. If you are using a network switch, a regular network cable will suffice.
- 2. Check the DIP swith position on the MOXA units as mentioned in 2.1 Initial Steps, Step 3.

 Install the MOXA software using the CD-ROM. The path for the setup file is:

<CD-ROM>: \DE-311\software\windows \magsuite_setup_3.4.exe

- 4. Run N-Port Management Suite's Configurator program that was installed earlier.
- 5. Click Broadcast Search as shown below

T Configur	ator			
Locate Server	Firmware	Configuration	View	Help
] 🙆 🧟 🛯 🖆		XA		
Model	IP A	ddress	MA	C Addre

- 6. All MOXA's on the network should be displayed.
- 7. For each MOXA, double click to display options:

Configuration 🛛 🔀
Network Settings OP_Mode Serial Settings Access Control Password Model Name: DE:311
Server Name NP60811 VP.604tess 192, 168, 33, 250
Iv Netmask 255 , 255 , 255 , 0
Image: Configuration 132 168 33 25 Image: Image: Image: Configuration Stable IP
Note: You can change settings by selecting the item. Click on the check box to select/deselect an item.
OK Cancel

8. After entering all the information according to your network settings, go to OP_MODE tab.

NOTE: Make sure the PC and the MOXA are **located on the same Subnet** in your network.

1

Change OP_Mode		
Port 1	Server	<u> </u>
More	Settings	,
	8	
Port OP_Mode 1 TCP Server		
TCP Server		Σ
TCP Port	4001	ОК
Destination IP addr		Cancel
Delimiter 1		- (Hex: 00-FF)
🔲 Delimiter 2		(Hex: 00-FF)
Force transmit timeout	0	ms (065535, 0:disable)
la seti da tisse	0	ms (0-65535, 0:disable)
macuvity unle	1 million	-

 Select "Change OP_Mode" and select "TCP Server". Click "More Settings" to display the dialog above. Each MOXA should have a different TCP Port. Click "OK" and go to "Serial Settings" tab:

Configuration						X
Network Settings 0	P_Mode Seri	al Settings	Access Control	Password		1
Port 1	e Serial Port Se	ltings				
Baud Rate	19200	•	Flow Contorl	None	•	
Parity	Even	•	UART FIFO	Enable	•	
Data Bits	8	•				
Stop Bit	2	-				
Port Se	ttings 200,E-8-2,None	FIFO Ena	ble			
				ОК	Can	cel

- 10. Change the serial settings to appear the same as your MCM Network.
- 11. Repeat steps 7-10 for all MOXA units and close the configurator application.
- 12. Run MCMCONFIG application that was installed together with the MCMSCADA application in Initial Steps, Step 4. The dialog below should appear on your screen:

Son MCM Configurati	on Tool 2.0	×
Address Select Co Get State Connection Status Response receive TCP/IP: 192.168.26.2	mmand us <u>S</u> end ed 54 : 4001 Timeout: 3000 ms	Port Settings
MCM Mode Idle Check Learn Improve Monitor Update	MCM Status Data Available Busy In Check Alarm ? Error ? Warning ?	Motor Status No Data OK Watch Line Watch Load Examine 1 Examine 2
		Artesis

13. Click "Port Settings" button to display the dialog below.

🕤 Serial		_	
PORT	COM1	-	
BAUDRATE	19200	-	
PARITY	EVEN	-	
DATA BITS	8	×	
STOP BITS	2	-	
• TCP/IP			
IP or URL 1	92.168.26	254	
	001		
тімеоит 🖪	000	msec	

- 14. Select "TCP/IP" as an option. This will enable TCP/IP input boxes which allow you to input the connection settings of a particular MOXA unit in your TCP/IP network. Make sure you type in the same information as you have in 2.1 Initial Steps, Step 3.
- 15. Click "OK". Now you are ready to select any of the devices inside that specific MCM Network and communicate with it. In the address pane on the main window, choose an address between 1-255 that corresponds to a MCM Unit on the same MCM Network as this particular MOXA unit.
- 16. MCMCONFIG Software will automatically start to send information to the MCM addressed. If you see MCM information displayed and the message "Response Received", then the communication with this MCM is working.
- 17. Repeat the steps 15 & 16 for all the MCM's in this network to check their connection.
- If you have multiple MCM Networks (thus multiple MOXA units), repeat steps 13-17 for each MCM Network.
- For extended capabilities of the MCMCONFIG software, please refer to the MCM User's Manual.



Artesis MCM: Simple, Effective CONDITION MONITORING "...IT SIMPLY WORKS"

Kemal Nehrozoğlu Cad. GOSB Teknoparkı Hightech Binası Kat: 3/B 10 Gebze 41480 Kocaeli / Turkey Tel: (0262) 678 88 60 Fax: (0262) 678 88 55