

分類/Classification	□ tDS □ tGW		□ PETL/tET/t	PET 🗹 DS/PDS/PP	PDS □ tM-	-752N
	□ I/O Care	b	U VXC Card	□ VxComm	🗆 Oth	er
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Q: How do I access multiple distributed serial devices through the Ethernet by using a serial master?

A: The following solution describes how to configure several PDS-700 modules to create a many-to-one pair-connection system. Once the configuration is complete, the serial master (e.g., a PLC) will then be able to easily access the various serial devices through the Ethernet. A detailed description of the configuration is provided below.



The following are examples of Pair-connection Settings:

Model		Port Set	tings (Defa	ault)		Pair-connection Settings	
		COM Port	Baud Rate	Data Format	Operation Mode	Remote Server IP	Remote TCP Port (Default)
Server Mode	PDS-720 #1	COM1	9600	8N1	M0	-	-
Client Mode	PDS-720 #2	COM1	9600	8N1	M0	IP Address of PDS-720 #1	10001
ClientMode	PDS-720 #3	COM1	9600	8N1	M0	IP Address of PDS-720 #1	10001

Step 1: Install the VxComm Utility on the Host PC and then run the Utility to search for any PDS-700 series modules connected to the network.



Download the Quick Start Guide

Download the VxComm Utility

Step 2: Configure the correct network

series modules. Refer to Chapter 5

PDS-700 Quick Start Guide for more

details.

Step 3: Enter the IP address of the PDS-720 #1, PDS-720 #2 or PDS-720 #3 modules in the address bar of a browser (such as IE, Chrome or Firefox, etc.), or click the "Web" button in the VxComm Utility to log in to the web configuration page. (Repeat this step for each module)

Step 4: Check that the firmware version for the module is v3.2.32[Oct 07 2013] or later in the "VCOM3 Firmware Version" field for the PDS-720 #1, PDS-720 #2 or PDS-720 #3. (Repeat this step for each module)

🕒 PDS-720 Setup Page	×	
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Firmware	PDS	-720 Firmware Information
Version Network	Device Information	
Settings	Module name	PDS-720
COM Port	Alias name	457
Settings <	VCOM3 Firmware version	v3.2.32[Oct 07 2013]
Misc. Settings	OS version	v 2.2.24[Apr 19 2010]
	OS Library version	v2.12 [May 02 2013]
	TCP/IP Library version	1.28 [May 22 2013]
	Free Memory (bytes)	121696



Step 5: Follow the procedure described below to configure the Pair-connection (Server Mode) on the Web Server for the PDS-720 #1 module.

- 1. Click the **"COM Port Settings"** tab to display the "Configure COM PORT" page.
- 2. Select the appropriate **COM Port number, Baud Rate and Data Format** settings from the relevant drop down options (e.g., "COM1", "9600", "8", "None" and "1").
- 3. Click the **"M0 (Transparent Mode)"** option button in the "Operation Mode" field.
- 4. Check the "<u>Save current settings to EEPROM</u>" and "<u>Apply current settings</u>" checkboxes, and then click the "<u>SET COM PORT</u>" button to complete the configuration.
- 5. Click the "Set Remote VCOM3 connection" link to proceed to the "PDS-720 Remote Vcom3 connection Setup Page" (Pair-connection settings).

	Configu	Configure COM PORT					
<u>Firmware</u> Version	Port (COM0 for ALL PORTS)	COM 1 💌					
Network	Baud Rate	9600 💌 🔼					
Settings	Data Bits	8 🗸					
COM Port	Parity	None 💌					
<u>Settings</u>	Stop Bits	1 •					
Misc. Settings	Rx FIFO Trigger Level	1					
	Data Buffered Delay Time(DBDT)	ms					
	End Char	(hex)					
	Operation Mode	 ● M0 (Transparent Mode) ● M1 (Slave Mode) ● M2 (Half-Slave Mode) (*)M3(Modbus Gateway) 					
	Slave Timeout	ms					
	Master Ack Timeout(MAT)	ms, 0:DISABLE					
	 ✓ Save current settings to EEPROM ✓ Apply current settings 						
<	Set Remote VCOM3 connection	6					

6. On the "PDS-720 Remote Vcom3 Connection Setup Page", confirm that the Local COM port/Remote COM port for the PDS-720 #1 is show as "None".

Firmware		PDS-720	Remote Vcom	3 connection Setu	p Page
<u>Version</u>	1# 1 and 0.01	a mant / Damata (
Network Settings	#Local COI0NONE	i port / Remote C	:OW port		
COM Port Settings	O Add COM	connect to COM	@ IP=	cmd port=	(default:10000)
Misc. Settings	 Add COM Delete # Delete ALL Save to EEPRO Reload from EEI 	connect to IP= M PROM	port=		DDBUS gateway O RTU O ASCII



- 1. Click the "COM Port Settings" tab to display the Configure COM PORT page.
- 2. Select the appropriate **COM Port number, Baud Rate and Data Format** settings from the relevant drop down options (e.g., "COM1", "9600", "8", "None" and "1").
- 3. Click the "M0 (Transparent Mode)" option button in the "Operation Mode" field.
- 4. Check the "<u>Save current settings to EEPROM</u>" and "<u>Apply current settings</u>" checkboxes, and then click the "<u>SET COM PORT</u>" button to complete the configuration.
- 5. Click the "Set Remote VCOM3 connection" link to proceed to the "PDS-720 Remote Vcom3 connection Setup Page" (Pair-connection settings).

	Configure COM PORT					
<u>Firmware</u> Version	Port (COM0 for ALL PORTS)	COM 1 💌				
Network	Baud Rate	9600 💌 🔼				
Settings	Data Bits	8 🕶				
COM Port	Parity	None 💌				
<u>Settings</u>	Stop Bits	1 💌				
Misc. Settings	Rx FIFO Trigger Level					
	Data Buffered Delay Time(DBDT)	ms				
	End Char	(hex)				
	Operation Mode	 M0 (Transparent Mode) M1 (Slave Mode) M2 (Half-Slave Mode) (*)M3(Modbus Gateway) 				
	Slave Timeout	ms				
	Master Ack Timeout(MAT)	ms, 0:DISABLE				
	 ✓ Save current settings to EEPROM ✓ Apply current settings 					
•	Set Remote VCOM3 connection	5				



- 6. On the "PDS-720 Remote Vcom3 Connection Setup Page", click the "Add COM" option button, and then enter the COM port for the PDS-720 #2 that is to be used (e.g., COM 1). Enter the appropriate IP address and TCP Port for the PDS-720 #1 settings in the relevant fields (e.g., "IP: 10.0.8.22" and "port: 10001").
- 7. Check the "**Save to EEPROM**" checkbox and then click the "**submit**" button to update the configuration.

Firmware	PDS-720 Remote Vcom3 connection Setup Page
<u>Version</u> Network Settings	# Local COM port / Remote COM port 0 NONE
COM Port Settings Misc. Settings	O Add COM connect to COM @IP= cmd port= (default:10000) O Add COM 1 connect to IP= 10.0.8.22 port= 10001 □ UDP □ MODBUS gateway O RTU O ASCII O Delete #
	○ Delete ALL 6 ✓ Save to EEPROM 7 □ Reload from EEPROM 7

8. Confirm that the newly created for pair-connection settings are show in the Local COM Port/Remote COM port area.

Firmware	PDS-720 Remote Vcom3 connection Setup Page
<u>Version</u> Network Settings	# Local COM port / Remote COM port 0 COM 1 <> TCP @ 10.0.8.22:10001 8
<u>COM Port</u> <u>Settings</u> <u>Misc. Settings</u>	 Add COM connect to COM @IP= cmd port= (default 10000) Add COM connect to IP= port= UDP MODBUS gateway O RTU O ASCI Delete # Delete ALL Save to EEPROM Reload from EEPROM submit

- 9. Reboot the PDS-720 #2 module to complete the configuration.
- 10. Repeat Steps 1 to 9 (Pages 4 and 5) for the PDS-720 #3 module.