

分類/Classification	🗆 tDS	□ tDS		PET 🛛 DS/PDS/PF	DS 🗆	l tM-752N
	□ I/O Car	d	U VXC Card	□ VxComm		l Other
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Q: How to Get M-7059 Data through Modbus TCP with tGW-715?

A: For detailed configuration steps, please refer to the following:

Before self-test, please ensure that your PC has workable network settings.

Step 1: Connect the tGW-715 module with M-7059 device using the RS-485 bus.

- 1. Connect both the tGW-715 and your computer to the same sub network or the same Ethernet Switch and power the tGW-715 on.
- 2. Connect the M-7059 device to COM1 (RS-485 bus) on tGW-715.
- 3. Supply power (+10 V_{AC} ~+80 V_{AC}) to DIO (+/-) pins on M-7059 device for channel 0 of DI is ON.
- 4. Supply power (+10 V_{DC} ~+30 V_{DC}) to the M-7059 device.



Step 2: Install the Modbus Utility and the eSearch Utility.

The Modbus Utility location:
 CD:\\ NAPDOS\Software\Modbus_Utility\
 Web link: http://ftp.icpdas.com/pub/cd/tinymodules/napdos/software/modbus_utility/

The eSearch Utility location:
 CD:\\ NAPDOS \Software\eSearch\
 Web link: http://ftp.icpdas.com/pub/cd/tinymodules/napdos/software/esearch/

Step 3: Run the eSearch Utility to search for tGW-715 connected to the network.

Step 4: Configure the correct network settings for the required tGW-715.

Please refer to **"Chapter 5-Configuring Ethernet Settings"** in the tGW-700 Quick Start Guide. If the

Download the Quick Start Guide.

Step 5: Open a web browser, and enter the URL for the tGW-715 module in the address bar of the browser, or click the "Web" button in the eSearch Utility.

Step 6: When the login screen is displayed, enter the password (use the default password: admin) in the login password field, and then click the "Submit" button to enter the configuration web page.

🥩 eSearch Utility [v1.0.8, Mar.22, 2013]						
<u>File S</u> erver	<u>File Server Tools</u>					
Name	Alias	IP Address	Sub-net Mask	Gateway	MAC Address	DHCP
tGW-715	Tiny	10.0.8.22	255.255.255.0	10.0.8.254	00:0d:e0:80:0a:78	ON
Status	ch Servers	Configurat	ion (VDP)	Web	Exit	



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Step 7: Click the "Port1" tab to display the Port1 Settings page.

Step 8: Select the appropriate Baud Rate, Data Format and Modbus Protocol settings from the relevant drop down options depend on the M-7059 device.

Check that the configuration details are the same as those shown below.

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	Default Setting of M-7059			
Port1 Settings of	Baud Rate	Data Format	Modbus Protocol	
tGW-715	9600	8, None, 1	Modbus RTU	





Step 9: Run the Modbus Utility, and click the "Modbus/TCP" button to select the controller.



Step 10: In the Modbus Utility, select the "Modbus/TCP Client" option from the "Client tools" menu.

🏙 Modbus Utility 🛛 Ver. 1, 2, 2	2012/10/15	
File Windows Client tools Setting	Help	
Modbus/TCP Cher Load S. UDP Search	nt Sc	ale Trend Help
Controller		COM Port Settin
192.168.255.1	Connect	
Communication Mode	Disconnect	Enable Mode En
		Modbus Timeout Baudrate
a logical		Data Bit Da
	Restore	Parity Pa
-		Stop Bit Sto
System Setting		Set
	NetID	

Step 11: Enter the IP address and TCP Port information for the tGW-715 in the "Modbus TCP" area, and then click the "Connect" button to connect to the tGW-715.

MBTCP Ver. 1	
ModbusTCP	Protocol Description
IP: 10.0.8.22	1 Read multiple coils status (0xxxx) for L
Port : 502	te 0: Transaction identifier - copied by
Connect Disconnect	Byte 3: Protocol identifier=0
Data	Byte 4: Length field (upper byte)=0
Polling Mode (no wax)	Statistic
Start Stop	Command Quant
	Total Packet bytes 0
Timer mode (fixed period)	
Interval 100 ms set	Polling or Timer mode (Date/Time)
	Stop time Start Time
Start Stop	Stop Time



Step 12: Refer to the "Protocol Description" field in the top right-hand section of the Modbus Utility windows. You can send a request command and confirm that the response is correct.

1. Type the Modbus command, as the image below shows.

MBTCP Ver. 1.1.4	
ModbusTCP IP: 10.0.8.22 Port: 502 Connect Disconnect T Data Log	Protocol Description FC1 Read multiple coils status (0xxxx) for D0 [Prefixed 6 bytes of Modbus/TCP protocol] Byte 0: Transaction identifier - copied by server - usually 0 Byte 1: Transaction identifier - copied by server - usually 0 Byte 2: Protocol identifier=0 Byte 3: Protocol identifier=0 Byte 4: Length field (upper byte)=0
Polling Mode (no wait) Start Stop Timer mode (fixed period)	Statistic Packet Clear Statistic Command Quantity Besponse Total Packet bytes 10 Packet Quantity sent 1 0 Packet Quantity received 1
Interval 100 ms Set	Polling or Timer mode (Date/Time) Polling Mode Timing (ms) Start time Start Time Stop time Stop Time
6yte0] [Byte1] [Byte2] [Byte3] [Byte4] [By 120006 120008 Rute0] [Byte1] [Byte2] [Byte3] [Byte4] y	e5] [Byte0] [Byte1] [Byte2] [Byte3]

Command Format:





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3. Verify that the response message correctly, as the image below shows.

Polling Mode (no wait) Start Stop Timer mode (fixed period)	Statistic Packet Command Qual Total Packet bytes 12 Packet Quantity sent 1	Clear Statistic ntity Response rence Total Packet bytes 00 % Packet Quantity received			
Interval 100 ms Set Start Stop	Polling or Timer mode (Date/Time) Start time Start Time Stop time Stop Time	Polling Mode Timing (ms) Max 0 Average Min 1000 000			
[Byte0] [Byte1] [Byte2] [Byte3] [Byte4] [Byte5] 1 2 0 0 0 6 1 2 0 0 0 8 [Byte0] [Byte1] [Byte2] [Byte3] [Byte4] [Byte5] [Byte0] [Byte1] [Byte2] [Byte3]					
Clear L	lists	EXIT Program			

Response Format:



- Complete -