

Q. 如何從二個 Modbus RTU/ASCII Master 設備來存取單一 個 Modbus RTU/ASCII Slave 設備?



A: tGW-700 模組的 Pair-connection 配置設定如下表:

СОМ		Port Settings		Pair-connection Settings		
Model	Model Port		Data Format	Server Mode	Remote Server IP	Remote TCP Port (預設設定)
					10.0.8.16	502
tGW-725	Port1	9600	8,N,1	Client	tGW-175的IP Addre	ss 及 TCP Port
	Port?	9600	9 NI 1	Client	10.0.8.16	502
	FUILZ	9000	0,11,1	Client	tGW-175的IP Addre	ss 及 TCP Port
tGW-715	Port1	9600	8,N,1	Server	-	-



請參考至下列步驟來配置 tGW-725 模組:

步驟 1: 請先確認您的 tGW-700 模組功能及 網路連線是正常運作的,詳細啟動 tGW-700 模組及網路配置設定,請參考至 tGW-700 快 速入門指南。

🛩 eSearch Utility [v1.0.8, Mar.22, 2013]						
Name tGW-725 tGW-715	Alias #1 #2	IP Address 10.0.8.7 10.0.8.16	Sub-net Mask 255.255.255.0 255.255.255.0	Gateway 10.0.8.254 10.0.8.254	MAC Address 00:0d:e0:80:09:2f 00:0d:e0:80:14:8c	DHCP ON ON
tatus	rch Server	s Config	uration (UDP)	💽 Web	Exit	
					l	圖 1-



步驟 2: 執行 eSearch Utility, 搜尋 tGW-725 模組, 然後單擊模組名稱。

步驟 3: 單擊 "Web" 按鈕來進入 tGW-725 網頁伺服器 (使用原廠預設密碼 "admin" 來登 入),或在瀏覽器的網址列中輸入 tGW-725 的 IP 位址。

步驟 4: 單擊 "Port1" 標籤來進入 Port1 Settings 設定頁面。 **步驟 5:** 選擇適當的 <u>Baud Rate 值、Data Format 值及 Modbus Protocol</u>, 設定範例如下: Baud Rate (bps) "9600"、Data Size (bits) "8"、Parity "None"、Stop Bits (bits) "1" 及 Modbus Protocol "Modbus RTU"。



Tiny Modbus Gateway (tGW-72x)

Home Port1 Port2 | Network | Filter | Monitor | Password | Logout

Port Settings	Current	Updated
Baud Rate	(bps) 115200	9600 • bits/S
Data Size	(bits) 8	8 ▼ bits/character
	Parity None	None 🔻
Stop Bits	(bits) 1	1 •
Slave Timeou	t (ms) 300	300 (Default: 300)
Char Timeout (I	oytes) 4	4 (4 ~ 15, Default: 4)
Silent Time	e (ms) 0	0 (0, 10, 20 65530, Default: 0)
Read Cache	e (ms) 980	980 (10, 20 65530, Disable: 0)
Local TCF	P Port 502	502 (Default: 502)
TCP Timeout (sec	onds) 180	180 (1 ~ 65535, Default: 180, Disable: 0)
Modbus Pro	otocol Modbus RTU	Modbus RTU 🔻
		圖 1-3



▼職 6:仕 ₽011	工的 Pair-0	connections	settings 區塊	,旧斛佩仙动	x 止 胡 参 乞 王 卜 衣	•
欄位	Server	Modbus	Remote	Remote	TCP Slave ID	RTU 9
	Mode	Protocol	Server IP	TCP Port	(1~247)	(1~

步驟 6	: 在 Port1	的 Pair-connection	n settings 區塊	鬼,相關欄(立設定:詰參考至下)	表·
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欄位	Mode	Protocol	Server IP	TCP Port	(1~247)	(1~247)
Pair-		ТСР	10.0.8.16	502		
Connection	Client	tGW-715的 Modbus Protocol、IP			0	0
Settings		ас	ldress	ort		

步驟 7: 單擊 "<u>Submit</u>" 按鈕來完成設定。

Pair-Connection Settings (Master/Slave Mo <mark>de)</mark>	Current	Updated
Server Moo	e Client	Client ▼ (Server=Slave, Client=Master
Modbus Protoc	ol TCP	TCP V
Remote Server	P 10.0.8.16	10 . 0 . 8 . 16
Remote TCP Po	rt 502	502
RTU Slave ID (1~24	7) 0	0 (0: Bypass, No check)
TCP Slave ID (1~24	7) 0	0 (0: Same as RTU)
		Submit

圖 1-4

步驟 8: 單擊 "Port2" 標籤來進入 Port2 Settings 設定頁面。

步驟 9: 選擇適當的 Baud Rate 值、Data Format 值及 Modbus Protocol,

設定範例如下: Baud Rate (bps) "9600"、Data Size (bits) "8"、Parity "None"、Stop Bits (bits) "1"及 Modbus Protocol "Modbus RTU"。



Tiny Modbus Gateway (tGW-72x)



Settings:

Port Settings		Current	Updated
	Baud Rate (bps)	9600	9600 🔻 bits/S
	Data Size (bits)	8	8 🔻 bits/character
	Parity	None	None 🔻
	Stop Bits (bits)	1	1 •
	Slave Timeout (ms)	300	300 (Default: 300)
	Char Timeout (bytes)	4	4 (4 ~ 15, Default: 4)
	Silent Time (ms)	0	0 (0, 10, 20 65530, Default: 0)
	Read Cache (ms)	980	980 (10, 20 65530, Disable: 0)
	Local TCP Port	503	503 (Default: 503)
	TCP Timeout (seconds)	180	180 (1 ~ 65535, Default: 180, Disable: 0)
	Modbus Protocol	Modbus RTU	Modbus RTU 🔻



欄位	Server Mode	Modbus Protocol	Remote Server IP	Remote TCP Port	TCP Slave ID (1~247)	RTU Slave ID (1~247)
Pair-		тср	10.0.8.16	502		
Connection Settings	Client	tGW-715的 Modbus Protocol、IP			0	0
sectings		ad	dress 皮 TCP po	ort		

步驟 10: 在 Port2 的 Pair-connection settings 區塊,相關欄位設定請參考至下表:

步驟 11: 單擊 "Submit" 按鈕來完成設定。

Pair-Connection Settings (Master/Slave Mode)	Current	Updated
Server Mode	Client	Client ▼ (Server=Slave, Client=Master)
Modbus Protoco	ТСР	TCP V
Remote Server IF	10.0.8.16	10 . 0 . 8 . 16
Remote TCP Por	502	502
RTU Slave ID (1~247)	0	0 (0: Bypass, No check)
TCP Slave ID (1~247)	0	0 (0: Same as RTU)
		Submit
		圖 1-6

步驟 12: 單擊 "Home" 標籤來確認 Port1 及 Port2 的 Pair-connection 設定是否正確。

Current port settings:

Port Settings	Port 1	Port 2
Baud Rate (bos	9600	9600
Data Size (bits	8	
Parit	None	None TE
Stop Bits (bits	1	1 54
Modbus Protoco	RTU	RTU
Slave Timeout (ms)	300	300
Char Timeout (bytes)	4	4
Silent Time (ms)	0	0
Read Cache (ms)	980	980
Local TCP Port	502	503
TCP Timeout (Seconds)	180	180
Pair-Connection Settings (Master/Slave Mode)	Port 1	Port 2
Server Mode	Client	Client
Remote Server IP	10.0.8.16	10.0.8.16
Remote TCP Port	502	502
RTU Slave ID	0	· E
TC <u>P</u> Slave ID	0	0

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請參考至下列步驟來配置 tGW-715 模組:

步驟 13: 執行 eSearch Utility, 搜尋 tGW-715 模組, 然後單擊模組名稱, 然後單擊 "Web"按 纽來進入 tGW-715 網頁伺服器 (使用原廠預設密碼 "admin"來登入), 或在瀏覽器的網址列中 輸入 tGW-715 的 IP 位址。

步驟 14: 單擊 "Port1" 標籤來進入 Port1 Settings 設定頁面。

步驟 15: 選擇適當的 Baud Rate 值、Data Format 值及 Modbus Protocol,

設定範例如下: Baud Rate (bps) "9600" 、Data Size (bits) "8" 、Parity "None" 、Stop Bits (bits) "1" 及 Modbus Protocol "Modbus RTU" 。

步驟 16: 在 Port1 的 Pair-connection settings 區塊,從 "Server Mode" 下拉式選單中選擇

"Server" 項目。

步驟 17: 單擊 "<u>Submit</u>" 按鈕來完成設定。 ※以上步驟可參考至 圖 1-8。

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Tiny Modbus Gateway (tGW-71x)

Home Port1 Network | Filter | Monitor | Password | Logout

Settings:

Port Settings	Current	Updated
Baud Rate (bps	9600	9600 🔻 bits/S
Data Size (bits) 8	8 • bits/character
Parit	/ None	None 🔻
Stop Bits (bits) 1	1 •
Slave Timeout (ms) 300	300 (Default: 300)
Char Timeout (bytes) 4	4 (4 ~ 15, Default: 4)
Silent Time (ms) 0	0 (0, 10, 20 65530, Default: 0)
Read Cache (ms) 980	980 (10, 20 65530, Disable: 0)
Local TCP Po	t 502	502 (Default: 502)
TCP Timeout (seconds) 180	180 (1 ~ 65535, Default: 180, Disable: 0)
Modbus Protoco	I Modbus RTU	Modbus RTU 🔻
Pair-Connection Settings (Master/Slave Mode)	Current	Updated
Server Mod	e Server	Server ▼ (Server=Slave, Client=Master)
Modbus Protoco	ITCP	TCP V
Remote Server I	Disabled	10 . 0 . 8 . 7
Remote TCP Po	t Disabled	503
RTU Slave ID (1~247) 1	1 (0: Bypass, No check)
TCP Slave ID (1~247	0	0 (0: Same as RTU)
	-	Submit



步驟 18: 單擊 "Home" 標籤來確認 Port1 的 Pair-connection 設定是否正確。

Current port settings:

Port Settings	Port 1		
Baud Rate (bps)	9600		
Data Size (bits)	8		
Parity	None	-E]	
Stop Bits (bits)	1	· · · ·	
Modbus Protocol	RTU		
Slave Timeout (ms)	300		
Char Timeout (bytes)	4		
Silent Time (ms)	0		
Read Cache (ms)	980		
Local TCP Port	502		
TCP Timeout (Seconds)	180		
Pair-Connection Settings (Master/Slave Mode)	Port 1		
Server Mode	Server	7	
Remote Server IP	-		
Remote TCP Port	-	- F - T	
RTU Slave ID	-	T	
TCP Slave ID	-		
			圖 1-9

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