Q. How do I access a single Modbus RTU/ASCII slave device from two Modbus RTU/ASCII master devices?

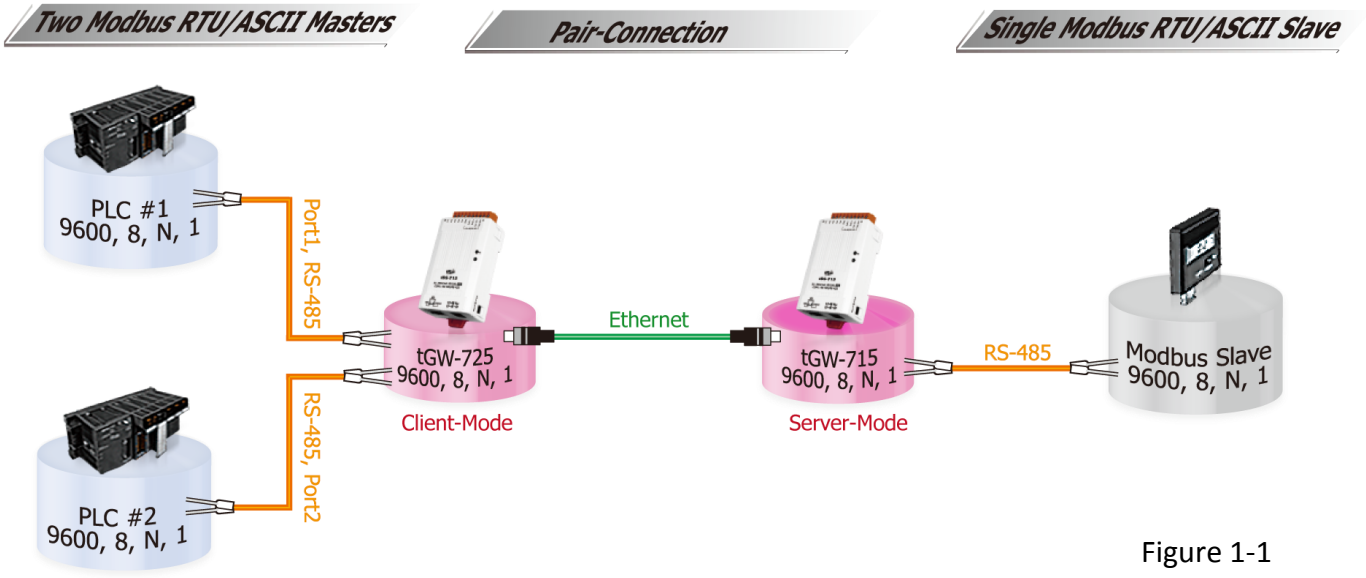

Figure 1-1

A: The Pair-connection settings for tGW-700 series modules are showed in the table below:

Model	COM Port	Port Settings		Pair-connection Settings		
		Baud Rate	Data Format	Server Mode	Remote Server IP	Remote TCP Port (default)
tGW-725	Port1	9600	8,N,1	Client	10.0.8.16	502
					IP Address and TCP Port for the tGW-175	
	Port2	9600	8,N,1	Client	10.0.8.16	502
					IP Address and TCP Port for the tGW-175	
tGW-715	Port1	9600	8,N,1	Server	-	-

Copyright © 2014 ICP DAS Co., Ltd. All Rights Reserved.

Follow the procedure described below to configure the tGW-725 module:

Step 1: Confirm that both the Ethernet connection and the tGW-700 series module are functioning correctly. For detailed information regarding how to install, configure and operate your tGW-700 series module, refer to the tGW-700 Quick Start Guide, which can be downloaded from:

Download the Quick Start Guide.

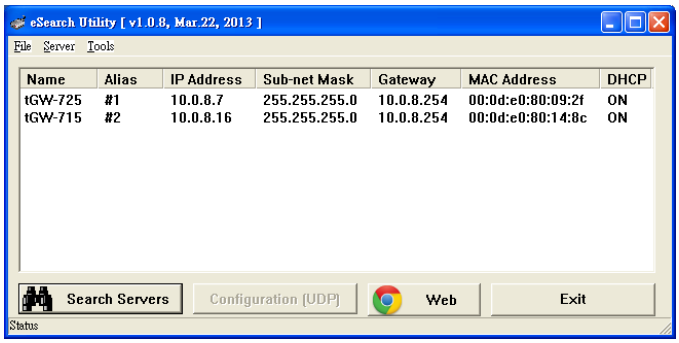

Figure 1-2

Step 2: Execute the eSearch Utility to search for any tGW-700 modules connected to the network, and then click the name of the tGW-725 module to select it.

Step 3: Click the **"Web"** button to log in to the web configuration pages for the tGW-725 module (use the default password **"admin"**), or enter the URL address of the tGW-725 in the address bar of the browser.

Step 4: Click the **"Port1"** tab to display the **Port1 Settings** page.

Step 5: Select the appropriate Baud Rate, Data Format and Modbus Protocol settings from the relevant drop down options. The following is an example: Baud Rate (bps) **"9600"**, Data Size (bits) **"8",** Parity **"None"**, Stop Bits (bits) **"1"** and Modbus Protocol **"Modbus RTU"**.

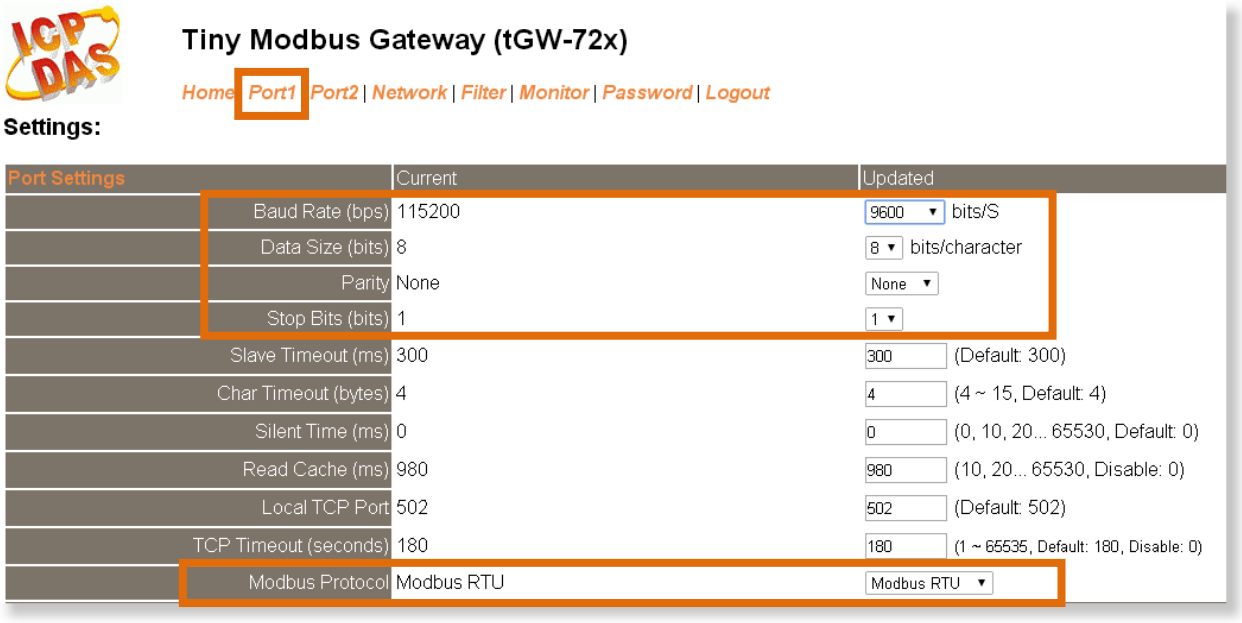

Figure 1-3

Copyright © 2014 ICP DAS Co., Ltd. All Rights Reserved.

Step 6: In the Pair-connection settings area for Port1, check that the configuration details are the same as those shown in the table below:

Field	Server Mode	Modbus Protocol	Remote Server IP	Remote TCP Port	TCP Slave ID (1~247)	RTU Slave ID (1~247)
Pair-Connection Settings	**Client**	**TCP**	**10.0.8.16**	**502**	**0**	**0**
		Modbus Protocol, IP address and TCP port for the tGW-715				

Step 7: Amend any details as required and then click the **"Submit"** button to complete the configuration.

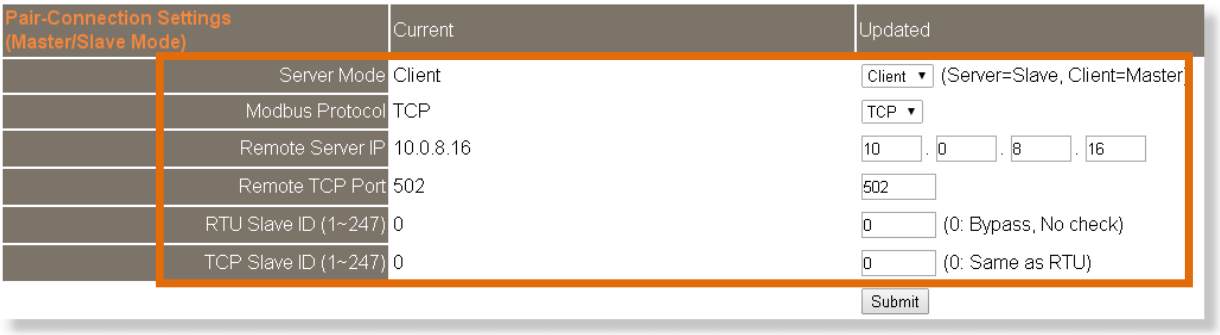

Figure 1-4

Step 8: Click the **"Port2"** tab display the **Port2 Settings** page.

Step 9: Select the appropriate **Baud Rate, Data Format and Modbus Protocol** settings from the relevant drop down options. The following is an example: Baud Rate (bps) **"9600"**, Data Size (bits) **"8",** Parity **"None"**, Stop Bits (bits) **"1"** and Modbus Protocol **"Modbus RTU"**.

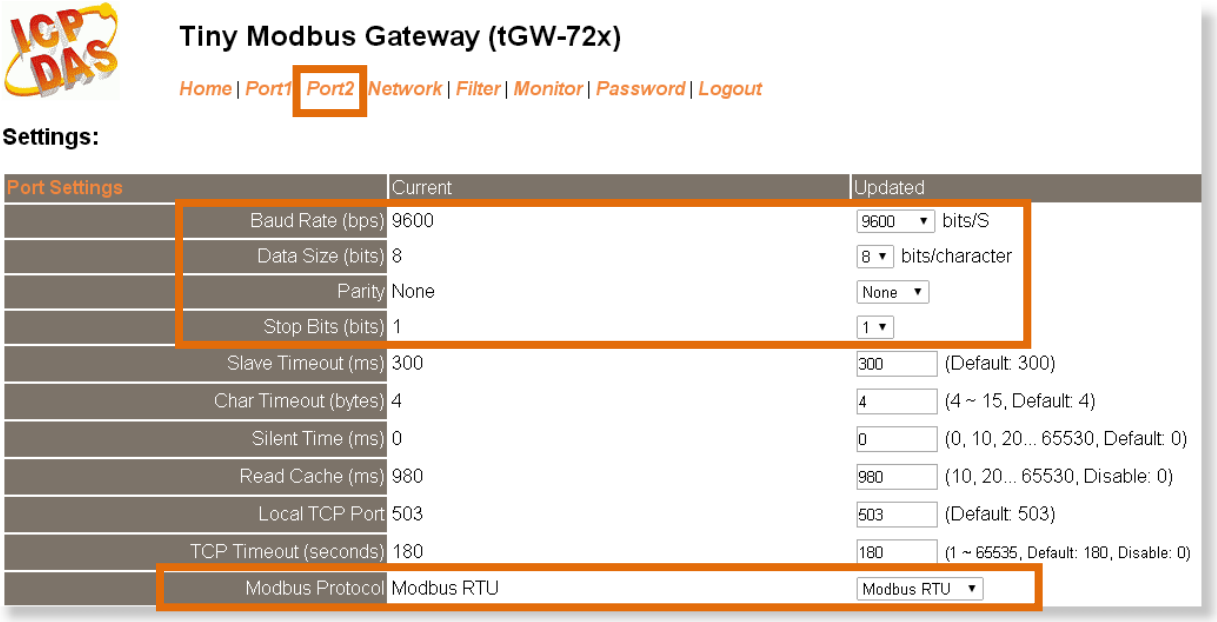

Figure 1-5

Copyright © 2014 ICP DAS Co., Ltd. All Rights Reserved.

Step 10: In the Pair-connection settings area for Port2, check that the configuration details are the same as those shown in the table below:

Field	Server Mode	Modbus Protocol	Remote Server IP	Remote TCP Port	TCP Slave ID (1~247)	RTU Slave ID (1~247)
Pair-Connection Settings	**Client**	**TCP**	**10.0.8.16**	**502**	**0**	**0**
		Modbus Protocol, IP address and TCP port for the tGW-715				

Step 11: Amend any details as required and then click the **"Submit"** button to complete the configuration.

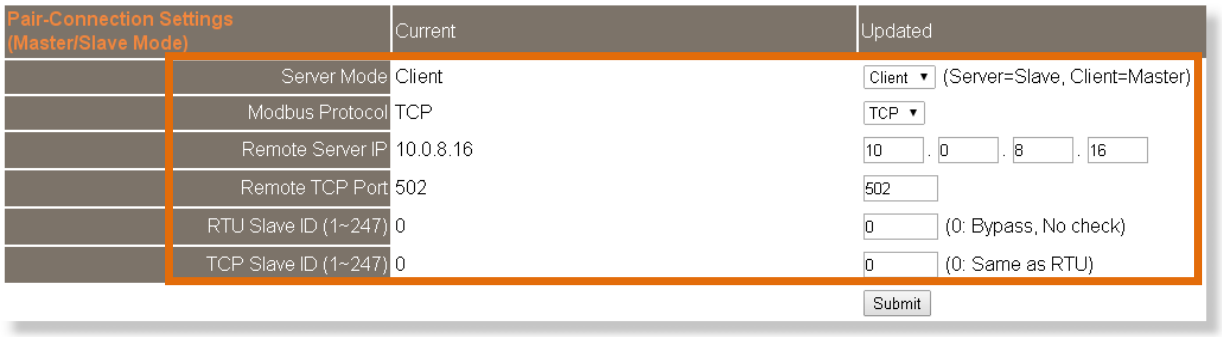

Figure 1-6

Step 12: Click the **"Home"** tab to confirm that the pair-connection settings for Port1 and Port2 are correct.

Current port settings:

Port Settings	Port 1	Port 2
Baud Rate (bps	9600	9600
Data Size (bits	8	8
Parity	None	None
Stop Bits (bits	1	1
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	0
TCP Slave ID	0	0

Figure 1-7

Copyright © 2014 ICP DAS Co., Ltd. All Rights Reserved.

Follow the procedure described below to configure the tGW-715 module:

Step 13: In the eSearch Utility, click the name of the tGW-715 module to select it, and then click the **"Web"** button to log in to the web configuration pages for the tGW-715 module (use the default password **"admin"**), or enter the URL address of the tGW-715 in the address bar of the browser.

Step 14: Click the **"Port1"** tab to display the **Port1 Settings** page.

Step 15: Select the appropriate **Baud Rate, Data Format and Modbus Protocol** settings from the relevant drop down options. The following is an example: Baud Rate (bps) **"9600"**, Data Size (bits) **"8"**, Parity **"None"**, Stop Bits (bits) **"1"** and Modbus Protocol **"Modbus RTU"**.

Step 16: In the Pair-connection settings area for Port1, select **"Server"** from the **"Server Mode"** drop down options

Step 17: Click the **"Submit"** button to complete the configuration.

※ **Refer to Figure 1-8 for an illustration of how to perform the above procedure.**

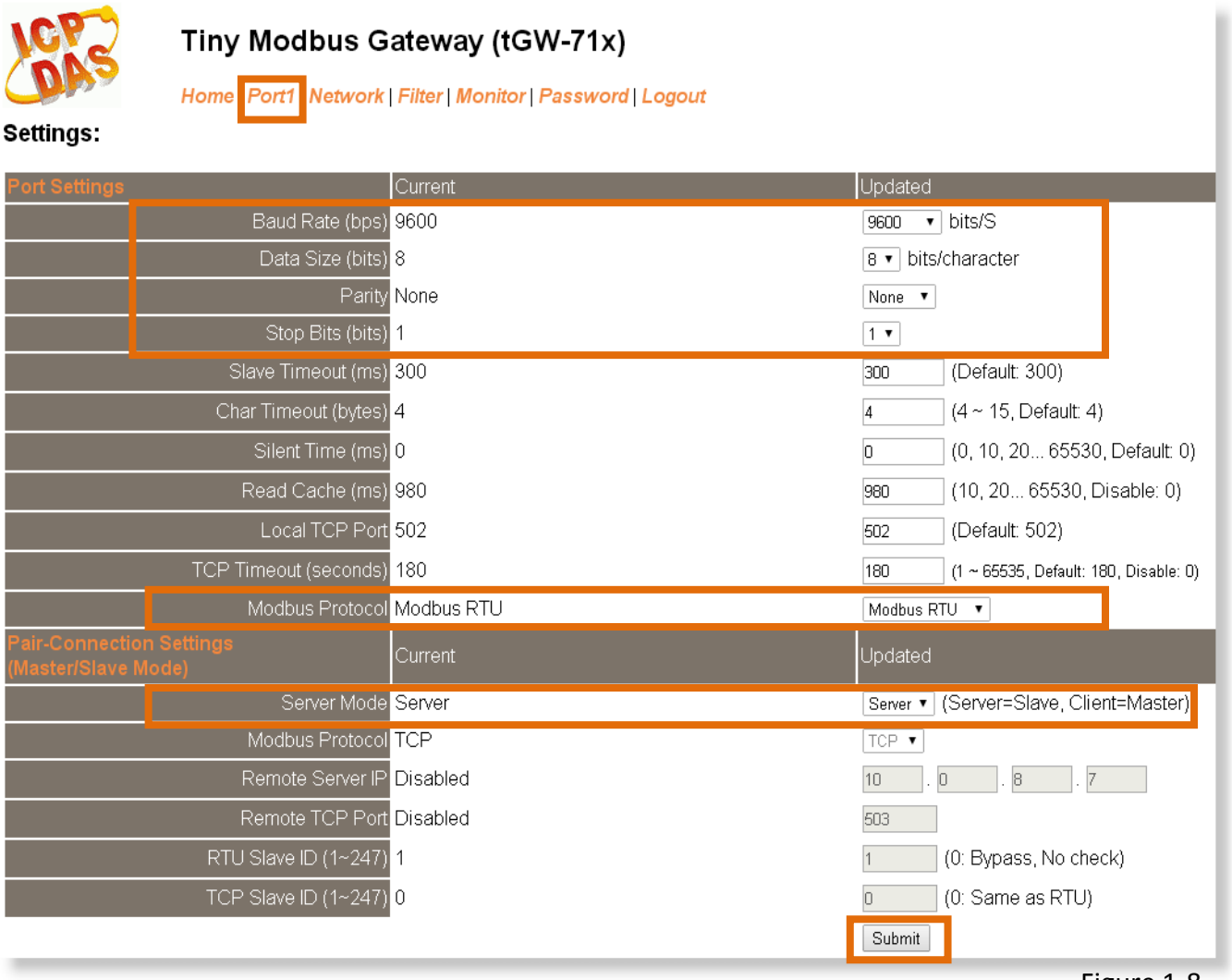

Figure 1-8

Copyright © 2014 ICP DAS Co., Ltd. All Rights Reserved.

Step 18: Click the **"Home"** tab to confirm that the pair-connection settings for Port1 are correct.

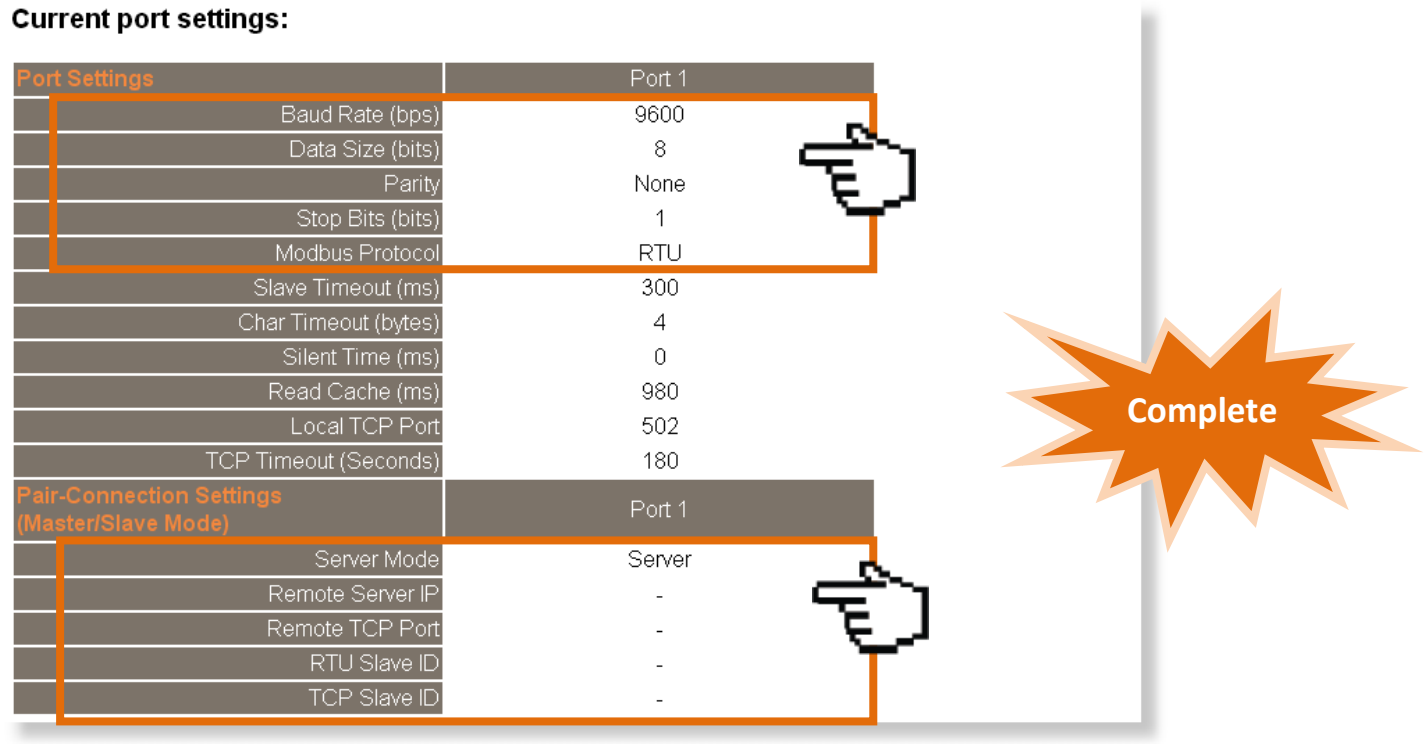

Figure 1-9

Copyright © 2014 ICP DAS Co., Ltd. All Rights Reserved.