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Application Guide H7710 DTU-First Connection-DTU Tool



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Revision History

Updates between document versions are cumulative. Therefore, the latest document version contains all updates made to previous versions.

Doc Version	Product	Release Data	Details
V1.0	H7710 V62 DTU	2017.09.29	First Release

1 Overview

This document shows how to connect Hongdian DTU with PC via serial port, and how to configure the parameters with the "DTU Tool".

Hongdian DTU (Data Transfer Unit) is a serial to modem device ,which transfer the serial date to TCP/IP data. H7710 DTU support 3G/4G communication, SMS control and etc.

H7710 DTU has single serial port version and dual serial ports version. The signal serial port version provides one kind of serial port in RS232, RS485, RS422 or TTL, and the dual serial ports version provides RS485+RS232, RS232+RS232 or etc. Wherein the dual serial ports version is that one port for data transmission and the other port for debuging.

2 Description

2.1 Product images

Images of Hongdian DTU are as below



Please pay attention to the terminal block description on the front panel, and the interface type in the rear panel, because different serial port type refers to different cable connection method.

2.2 Wiring diagram

Please select the properly wiring method according to your DTU.

2.2.1 Signal serial port

1. RS232 Connection

H7000 DTU



2. RS485 Connection

H7000 DTU



3. RS422 connection H7000 DTU DCD 1 T(-) R(-) 2 R(+) 3 T(+) GPIO 4 OFF 5 GPIO 6 T(-) 7 R(-) T(+) 8 R(+) GPIO 9 GND 10 GND 11 GND Vin+ 12 Vin+ 4. TTL connection H7000 DTU

RS422 Terminal



2.2.2 Dual serial ports

Take RS232+RS232 connection as the example, while other types are similar. **1.** RS232+RS232 connection



2.3 Login DTU tool

2.3.1 Preparation

1. Make sure you have connect the DTU device with PC.





2. For configuring or debugging the DTU device, the suggested tools are as below:

🔟 m2mtoolsbox.exe

http://www.scom32EN.exe

Wherein, the "m2mtoolsbox" is also called the "DTU Tool" in this document. And the "sscom" is serial port tool, similar to "Hyperterminal", "SecureCRT", and etc.

2.3.2 DTU tool settings

1. Make sure the driver is installed if you are using the DB9-to-USB connector.

Driver Software Installation		×
USB-SERIAL CH340 (COM18) insta	lled	
USB-SERIAL CH340 (COM18)	🗸 Ready to use	
		Close
2. Open the DTU config tool		
DTU m2mtoolsbox.exe		
3. Select the properly COM port		
DTU Tool CONIG-S7600 Opened		Setup išž SetialPort About US

4. Then the dialog poped up



5. Restart the DTU tool. It will show "successfully" tip after connected.

DTV Tool COM18-57600	Opened	
Parameter Name	Parameter Value	
SN SN	222222222	SN[length <= 18, string]
APN	CMNET	APN[length <= 32, string]
service code	*99***1#	Service code[length \Leftarrow 32, string.
baud rate	57600	serial port setting[integer,300~11
SMS center number		SMS center number[multiple number
DTV ID	18575529587	DTU ID[length <= 32, string.Starti
📃 debug info	INFO	output debug info to serial port [
protocol to DSC 1	TCP+DDP	protocol to DSC[VDP,TCP,VDP+DDP,TC
DSC IP address 1	121, 37, 24, 177	DSC IP address
DSC port 1	52333	DSC port[1~65535]
DSC domain 1	mdtu.com	DSC domain[length \Leftarrow 64 bits strin
📃 channel service number		channel service number[multiple nu
protocol to DSC 2	UDP+DDP	protocol to DSC[UDP, TCP, UDP+DDP,
DSC IP address 2	0.0.0.0	DSC IP address
DSC port 2	5002	DSC port[1~65535]
	III	700 1 · F1 · · / 04 1··· · ·

[14:11:55] Getting parameter from device... [14:11:55] Get parameter successfully.

6. If you want to edit the parameters , for example to change the APN, click the value to edit, then click "Setup" to confirm, as below.

DTU Tool COMIS-57600 Parameters Upgrade	Opened	I	Inquire Setw	p More
🗌 Parameter Name	Parameter Value	Parameter N	Note	
SN 🗌	222222222	SW[length <- 10, string]	<u>^</u>	SetupAll
🔽 APN	My APN	APN[length <= 32, string]		Restart
🛛 🔲 service code	*99***1#	Service code[length <= 32, string.]		nestalt
📃 baud rate	57600	_serial port setting[integer,300~115200]		Restore
Tips	t parameter successfully OK	7.		

7. Click "More->Login", input password "admin", for more configuration

Parameters Upgrade					
Parameter Name Parameter Value		ter Value	Parameter Note		
SN	2222222222		SN[length <= 18, string]	SetupAll	
APN	CMNET		APN[length <= 32, string]	Pertent	
service code	*99***1#	Administrator Login	×	Restart	
baud rate	57600	in and the second second		Restore	
SMS center number				",", each number less = SetupCommen	
DTV ID	18575529587			m,'+'or letter, other b	
debug info	INFO			, INFO, DEBUG. ERR, WARN	
protocol to DSC 1	TCP+DDP	Password		TCP_SER] Export	
DSC IP address 1	121.37.24.177				
DSC port 1	52333		OK	Login	
DSC domain 1	mdtu.com				
🗌 channel service number				ed by ", ", each number	
protocol to DSC 2	UDP+DDP		Modity password	SMS, TCP_SER]	
DSC IP address 2	0, 0, 0, 0		DSC IP address		

8. This ducument is giving you a complete operation step at the first using, for the advancing configuration, please read the DTU user manual or other guidance.





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