



GT-541

Quick Start Guide

Dec. 2011 Version 1.0

Package checklist

The package includes the following items:

- One GT-541 hardware module
- One GSM Antenna
- One RS-232 cable (CA-0910)
- One Quick Start Guide
- One software utility CD
- One screw driver

Note:

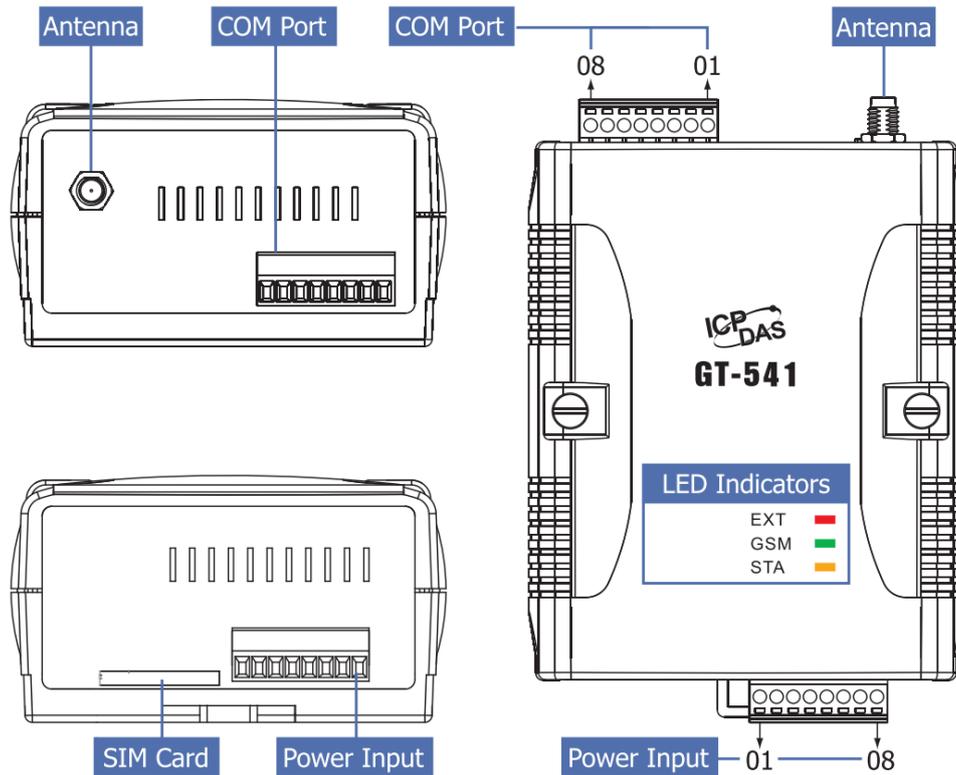
If any of these items are missed or damaged, contact the local distributors for more information. Save the shipping materials and cartons in case you want to ship in the future.



● Appearance and pin assignments

Power Input		
Terminal No.		Pin Assignment
N/A	01	N/A
	02	N/A
	03	N/A
GND	04	GND
Initial	05	Init
Power Input: 10 ~ 30 VDC	06	DC.+VS
	07	DC.GND
Frame Ground	08	F.G

COM Port		
Terminal No.		Pin Assignment
COM2 RS-485	01	DATA-
	02	DATA+
COM1 RS-232	03	TxD1
	04	RxD1
	05	GND
N/A	06	N/A
Utility Port RS-232	07	TxD
	08	RxD



LED indicators

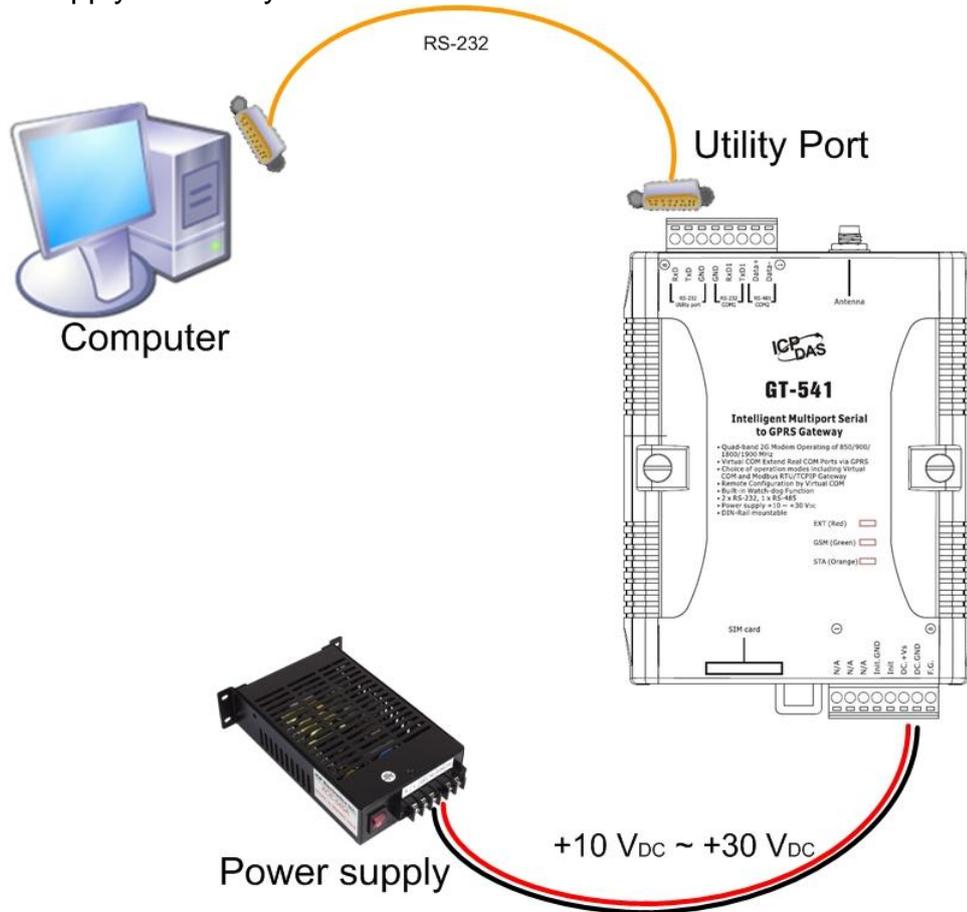
LED	Description		
EXT(red)	On	The external Power is active	
	Off	The external Power is not active	
GSM(green)	Blinking (3 sec)	Modem normal	
	Off	Modem fail (or Blinking(not 3 sec))	
STA (orange)	Normal	GSM Fail	PIN code is wrong
	Blinking (1 sec)	Always on or off	Blinking per 50 ms

● Installation

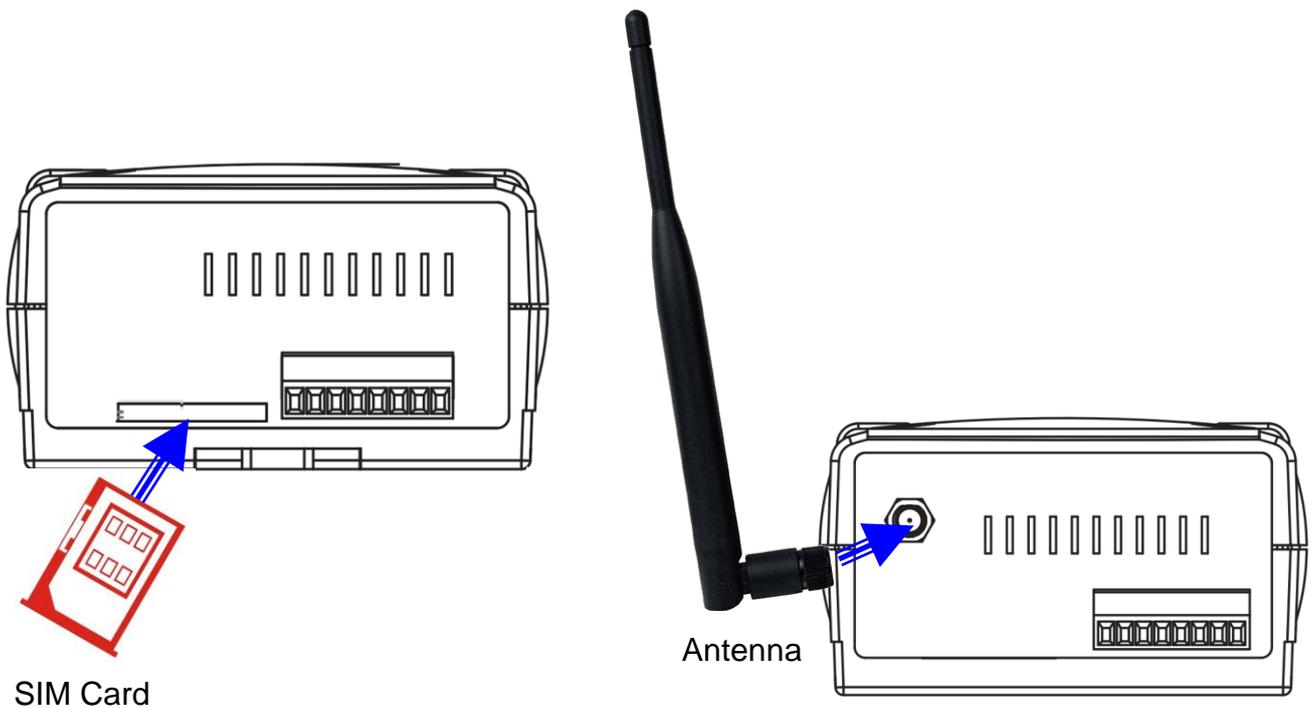
If users want to start GT-541 normally, it needs to follow these steps to install the GT-541 below:

1. **Install the antenna**
2. **Plug in the normal SIM card (Before apply the SIM card, confirm its GPRS function is OK by mobile phone.)**
3. **Install the micro SD(Optional, for the voice alarm files)**
4. **Pin06 and Pin07 of the power input connect to the DC.+VS and DC.GND of the power supply. (+10 V_{DC} ~ +30 V_{DC})**

➤ Power supply and Utility Port installation

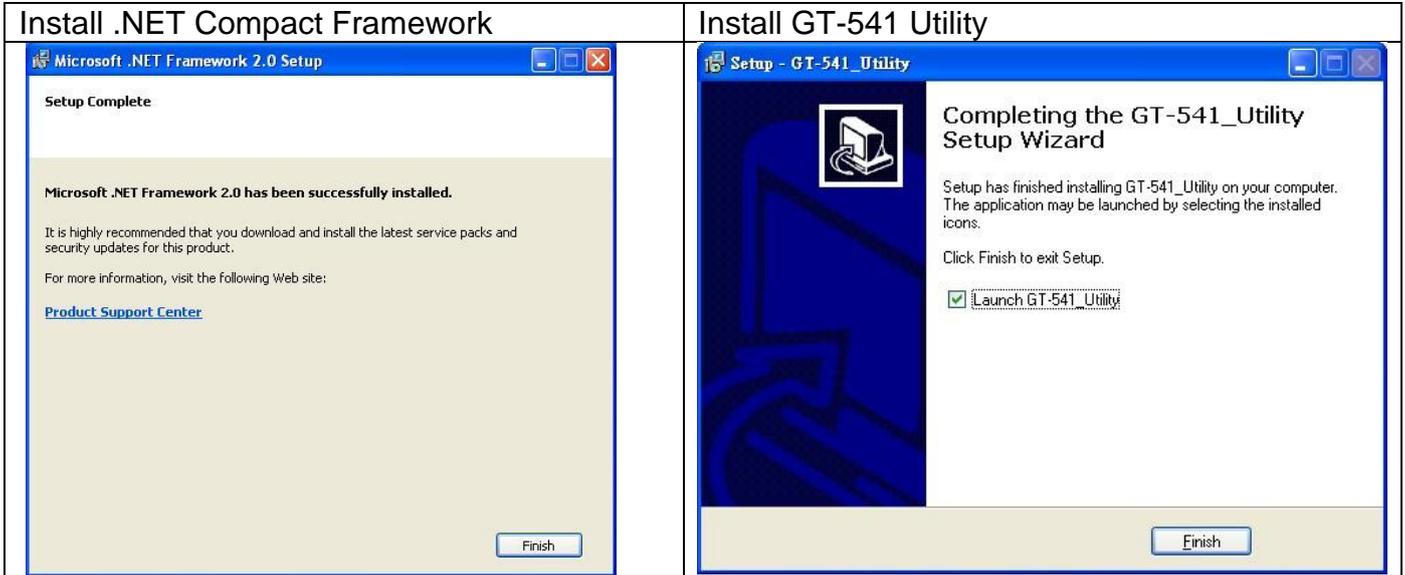


➤ Antenna and SIM card installation



● GT-541 Utility

It needs the runtime environment with .NET Framework 2.0 or above to execute the GT-541 Utility in the PC.



● Operation

For setup your GT-541, you can follow these steps as following.

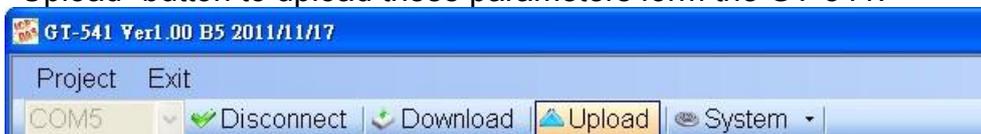
1. Select the COM port of the host PC and connect to the Utility port of GT-541



2. Click the “Connect” button to connect to the GT-541. If the connection is failed, check the COM port settings and wiring.



3. Click the “Upload” button to upload these parameters from the GT-541.



4. Set Parameters -- System :

- Project(none)
 - System
 - COM Port

Parameters	Value	Description
Protocol	VxComm mode	Read Only
Address	1	Read Only
Remote Server	0.0.0.0	Type remote ser...
Remote Server Port	11000	Type remote ser...
GPRS user name	GUEST	This parameter ...
GPRS password	GUEST	This parameter ...
GPRS APN	INTERNET	This parameter ...
Virtual IP	127.0.11.22	This parameter ...
Module Alias	ICP DAS	Module's alias, ...
Heartbeat Time	10	Heartbeat Time ...
Com End Method	0	This parameter ...
Com End Param.	0	This parameter ...

Parameters	Description										
Protocol	GT-541 support protocol. Read only										
Address	The address of the GT-541. Read only										
Remote Server	The remote VxServer server's IP or domain name										
Remote Server Port	The remote VxServer server's Port										
GPRS User name	GPRS user name										
GPRS password	GPRS password										
GPRS APN	GPRS APN (access point name)										
Virtual IP	Virtual IP. Range: 127.0.0.1~127.255.255.254 , This parameter can't be the same with other device.										
Module Alias	Module Alias. (max. 7 character)										
Heartbeat Time	Heartbeat time. Range: 10 sec. ~ 65535 sec.										
Com End Method	<table border="1"> <thead> <tr> <th>Com End Method</th> <th>Com End Param.</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>0: Fixed Time. It is as complete a data when no data came at a fixed time</td> <td>2 ms~ 65535 ms</td> <td rowspan="3">The GT-541 will transmit a data when there is a data more than 1000 bytes.</td> </tr> <tr> <td>1: Fixed Length , It is as complete a data when the length of a data more than fixed length</td> <td>1 ~ 1000</td> </tr> <tr> <td>2: Fixed end byte. It is as complete a data when receives the fixed end byte. Like "CR" (0x0d)</td> <td>0 ~ 255</td> </tr> </tbody> </table>	Com End Method	Com End Param.	Remark	0: Fixed Time. It is as complete a data when no data came at a fixed time	2 ms~ 65535 ms	The GT-541 will transmit a data when there is a data more than 1000 bytes.	1: Fixed Length , It is as complete a data when the length of a data more than fixed length	1 ~ 1000	2: Fixed end byte. It is as complete a data when receives the fixed end byte. Like "CR" (0x0d)	0 ~ 255
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Com End Param.											

5. Set Parameters – COM Port :

<ul style="list-style-type: none"> Project(none) System COM Port <ul style="list-style-type: none"> COM1 COM2 	Parameters	Value	Description
	Port	COM1 (RS-232)	Read Only
	Data Bit	8	8 or 7
	Stop Bit	1	1 or 2
	Parity Bit	none	none,odd,even
	Baudrate	9600	bps

Parameters	Description
Port	COM Port name. Read only
Data Bit	7 or 8 bits
Stop Bit	1 or 2 bits
Parity Bit	None, even, Odd
Baudrate	2400, 4800, 9600, 19200, 38400, 57600, 115200bps

6. Click the “Download” button to download these parameters to GT-541



● **PIN/PUK Code**

When the GT-541 starts and the STA LED is blanking per 50 ms, it is needed to input the PIN or PUK code in the GT-541. In this condition, click “System->Input PIN/PUK” button to set the PIN/PUK code.



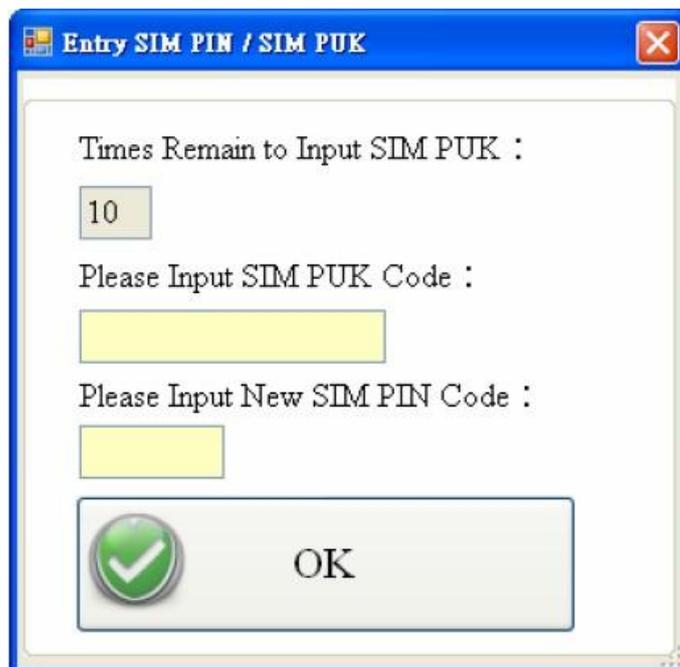
(1) Asking for inputting PIN code:

If the PIN code is effective, the “Enter SIM PIN/SIM PUK” window would pop-up as follows. If the number of times for inputting the wrong PIN code is more than the allowed number, the PIN code would be ineffective. And the “PUK code” window would pop up.



(2) Asking for inputting PUK code

If the PIN code is ineffective, the “PUK code” window would pop-up as follows. As the number of times for inputting the wrong PUK code is more than allowed number, the SIM card would be ineffective forever. Therefore, it is important to input the correct PUK code.



● Troubleshooting

Item	Trouble state	Solution
1	EXT LED is off	Please check the external power and wire connection.
2	STA is always on	<ol style="list-style-type: none"> 1. Check SIM card. 2. Check Antenna. 3. Check the GSM signal strength. 4. Check your SIM Card that enabled GPRS function
3	GT-541 Utility can not connect to GT-541 device	Check COM port wire connection.
4	Don't have the user name, password or APN of GPRS	Confirm these parameters with your cell provider.
5	Can't connect to VxServer	<ol style="list-style-type: none"> 1. Check the remote server's IP 2. Check the remote server's Port 3. Check the Virtual IP

● Technical Support

If you have problems about using the GT-541, please contact ICP DAS Product Support.

Email: Service@icpdas.com