Quick Setup Guide

WT-GP3-V1 SMART MODEM





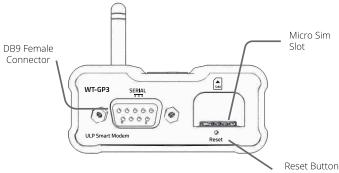
Wireless Technologies USA Witech USA Corp

Content

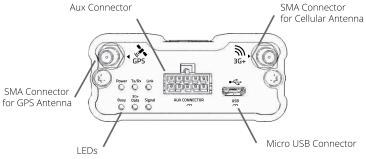
Quick look at Modem WT - GP3 - V1 3G	4
LED Signals	5
What comes in the box	6
Additional accesories	7
Operational ratings	8
Enclosure Requirements	9
Installation and operating Instructions	9
Starting the WT - GP3 - V1	10
WT - GP3 - V1 as Server TCP	19
WT - GP3 - V1 as Client TCP	21
We want to help!	24

Quick look at 3G Modem WT - GP3 - V1

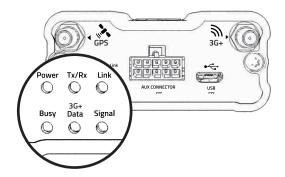
Front View



Rear View



LED Signals



Power (Red): Indicates if the modem is ON.

Tx/Rx (Blue): Indicates data flow through USB or D89.

Link (Green):

Indicates the modem connection status.

Busy (Red): Indicates if the modem is busy.

3G+ Data (Blue): Indicates data flow from/to the network.

Signal (Green): Indicates the signal strength of the modem.

What comes in the box

The following accessories are included in the modem WT – GP3 - V1 3G Modem box:



Cellular Antenna

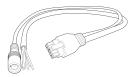
Using this antenna will allow connection with GPRS and 3G networks in the area.



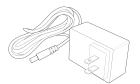
USB to Micro USB cable

Cable that allows to connect the modem WT – GP3 to any computer via USB for all configurations; update firmware, and/or provide energy from a power adapter.

Aux cable



With this cable various functionalities are possible with the WT – GP3 - V1 3G Modem. Connect the power adapter; 2 analog inputs, 1 output and 2 digital inputs, as well as I2C pins for connecting to external devices.



Power Adapter

Use this adapter with the aux cable for providing power to the modem WT – GP3 - V1 3G.

GPS Antenna

Using this antenna will allow connection with GPS and GLONASS satellite systems.

Additional Accessories



USB - Serial Cable

USB – Serial Cable – this cable is not included in the modem WT – GP3 - V1 box. Using this cable allows the modem to connect with any computer via a D89 connector to access all configurations and/or history or other stored variables.



Micro SIM card

SIM card type supported is 3FF type as known as Micro SIM.

Note: The user must validate the supported bands at moment to choose SIM Card mobile operator.

Operational Ratings

Power supply:

5-30 Vdc, 150 mA max, LPS or Class 2 - Main. 5-30 Vdc, 150 mA max, LPS or Class 2 - DB9. 5 Vdc, 230 mA max, LPS or Class 2 - USB.

Note: Only one supply source may be used at any one time.

Environmental: -30°C to +60°C ambient. Temperature code: T5.

Enclosure Requirement

Front and Rear sections are made of R/C (QMFZ2), Chi Mei Corp., cat no. PC-110, rated minimum V-2, 125 C (RTI). 1.6 mm thick (nominal). Secured together by screws.

Installation and operating Instructions

Suitable for use in Class I, Division 2, Groups A, B, C, D hazardous locations, or nonhazard locations only.

These devices are open type devices that are intended to be installed in a tool only accesible enclosure that is suitable for the environment.



WARNING - EXPLOSION HAZARD

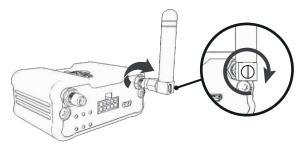
Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations.

The USB port may only be used for supplying power to the equipment during installation and set-up within non-hazardous location. The USB port and its associated interconnecting cable shall remain inaccessible within the hazardous location.

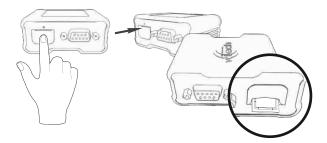
Antennas intended for use in Class I, Division 2 hazardous locations must be installed within the end use enclosure. For remote mounting in an unclassified location, routing and installation of the antennas shall be in accordance with National Electrical Code Requirements (NEC/CEC).

Starting the WT – GP3 - V1

To begin using the modem WT – GP3 - V1 follow the next steps:

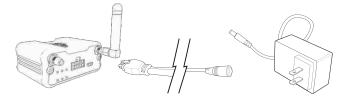


1. Connect the cellular antenna to the SMA connector. The correct way to install it is by screwing it clockwise.

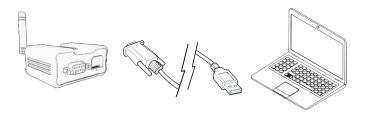


2. Insert the Micro Sim Card in the provided slot. Follow the guide to correctly insert it. The provided slot secures the Micro Sim Card to prevent it from disconnecting.

3. Connect the Aux Cable.



4. Next, connect the power adapter with the Aux Cable.



5. Connect the USB to Micro USB Cable to any available USB port in the computer for the modem configuration.

6. Run the WT – Config 1.4.1 or recent desktop application. Please download from:

www.witechusa.com

Once you have been in Witech USA website, select the option **Download** to enter to the downloads section.



If you already have an user with Witech USA, select the ${\rm Login}$ option,. If not, you have to sign up. For that press the button ${\rm Register}.$



To download an application or firmware please sign in on our website



With the successfull registration, a message like below appears. Search in the inbox of the account used for the register and click on the activation link that you will have received.

Message Your account has been created and an activation link has been sent to the email address you entered. Note that you must activate the account by selecting the activation link when you get the email before you can login.

Now with your **username** and **password** you can make the registration clicking on the **Register** button. Type the needed data and click **Log In.**

Once logged in, you have the options for download Software or Firmware. For this case, click on **Software.**



Select the software for install **WT Config** and click in the **Download** button. Your application should download inmediatly. The installation process is friendly, you will have a guide during all the process.

SOFTWARE		
Field Manager	Details	Download
WT Config	Details	Download
SISTEGO-v1.0.9, apk	Details	Download
Gateway	Details	Download
NOVO Mobile	Details	Download

All WT – GP3 - V1 3G modem configurations can be accessed through this application; update firmware, stablish connections, between other functionalities.

Home							0000120 9	Seconds to up
evice: SMARNIMODE/MICIE > Response timeOut	10 Refr	esh data every	120	econds	Petrest		N	ilect
Command		Data n	sceived					(Courseast
Comm port: Select a port v Baud rate: 9600 v	Dope		to see last 0	ips position	1	Gps setti		
		IME					antification:	
Select a command	Send	I Pul	se counter 1	N/A	0	Max to a	/oltage of PS	5 Mode
Type custom command	Send		Ise received		0			
			al Value	N/A		Max to e	deactivate:	
		Fk	ow rate:		N/A			🕒 Set
			Voltage		sure	Temperature	BT	
			voitage	ries	sure	remperature		5
		- 24	alog Inputs			Digital input	s/outputs	
		Ê	Input	Va	lue	Input	0	utput
		Ê	Input	Va	lue	Input	0	utput
			input	Va	lue	Input	0	utput
			input	Va	lue	Input	o	utput
			Input	Va	lue	Input	0	utput
		Sta	tus		lue	Input	0	utput
		Sta	tus mection statu		lue	Input	0	utput
		Sta Cor De	tus inection statu rice Status:	1800 TU 20	lue	Input	0	utput
		Sta Cor De'	tus mection statu vice Status: SIM 1 Statu	19: 1	lue	Input		
		Sta Cor De'	tus nection statu rice Status: SIM 1 Statu SIM 2 Statu	19: 1	lue	Input		3G Status
		Sta Cor Der S API	tus mection statu rice Status: SIM 1 Statu SIM 2 Statu N Information	19: . 18: .	lue	Input	G	3G Status
		Sta Cor Der S API	tus nection statu rice Status: SIM 1 Statu SIM 2 Statu	19: . 18: .	lue	Input	G	
		Sta Cor Der S API	tus mection statu rice Status: SIM 1 Statu SIM 2 Statu N Information	18: . 18: .	lue	Input	G	3G Status
		Sta Cor Der S API	tus mection statu rice Status: SIM 1 Statu SIM 2 Statu N Information	18: . 18: .	lue	Input) 3G Status) Add) Delete
		Sta Cor Der S API	tus mection statu rice Status: SIM 1 Statu SIM 2 Statu N Information	18: . 18: .	lue	Input) 3G Status

7. Choose SMART MODEM GP3 in the Device section.

File 🎤 Tools 🕸 Settings 🕜 Help				
Y Home				0000120 Seconds to up
Device: SMARNIMODEMICE V	nse timeOut 10 Refresh da	ta every 120 seconds	🕽 Refresh	wilect
Comm port: Select a port v Baud rate: 96	500 ∨ 🔅 > Open	Click to see last Gps position IMEI: Pulse counter 1		Gps settings: Device identification: N/A Threshold Voltage of PS Mode

8. At this point, please know the **COMM port** that the computer assigns to the modem when it connects via USB. With this information, go to the **Command** section and select the correct port and pay no attention to the **Baud Rate** value (given is connected via USB) click the button **OPEN** in order to gain access to the modem.



9. Once the port has opened (in this case COM8), if everything is correct the screen will show and notify the type of parity; the data size and its configuration.

Home I Modbus data O Inputs/Outputs 🔅 General settings	lột Alam		00000	79 Seconds to up
	resh data every 120 secon	nds \varTheta Refrea	h	wilect
	ormation ds to connected device the selec	ted command	(0	(E)
[Test communication]		Band	No data No data	No data
Sen	General information			
08/21/2018 13:58:59 >> Port opened as 8N1 Parity: None	APN:	No data		
Data size: 8	Remote Server Port:	No data		
08/21/2018 13:59:08 >> Command sent: Testing communication 08/21/2018 13:59:08 >> Command Sent - Response: AT OK	TCP Listenning Port:	No data		
	Wiserver Connection:	No data		
	Allow Reset - Restore:	No data		
	Device IP:	No data		
	Remote Server IP:	No data		
	Supply Voltage:	No data		
	Model:	No data		
	Manufacturer:	No data		
	Firmware Version:	No data		
	IMEI:	No data		
	Device Date-Time:	No data		
	SIM Card Status:	No data		
	Wiserver Modern ID	No data		
	Wiserver Master ID	No data		
	Wiserver Family ID	No data		
	Operational band:	Automatic		~ >
		1		
	Read only mode			Reset

It is recommended to send the Test communication command to make sure there is communication with the modem.

10. By pressing the Refresh button located in the top right corner, all data will be updated in the General Information box – all configuration information can be viewed here.

Home 🔳 Modbus data 🔿 Inputs/Outputs 🔅 General se	w. the as				Inform			
none in modous data O inputs/outputs se deneral se	ettiriyə sişe man	II.		_	Initiates/:	tops the up	odate inform	atio
rice: SMART MODEM GP3 V 🔲 Response timeOut 1	0 Refresh dat	a every 120	secor	ds \varTheta Re	frish		wilec	:h
ommand		Data received		-	_			
Comm port: COM8 V Baud rate: 9600 V	Close	TCP	((()))	NO	(1-		(E)	1
Test communication ~	Send	Mode	Signal	Band	Echo On	Single	Normal	
Type custom command	Send							
	-	General infor	nation					
08/21/2018 14:13:51 >> Port opened as 8N1 Parity: None	^	APN:		witech.com	n,user,password			
Parity: None. Data size: 8		Remote Serve	r Port:	1010				
08/21/2018 14:13:56 >> Command sent: Testing communication		TCP Listennin	a Port	2020				
08/21/2018 14:13:56 >> Command Sent - Response: AT OK		Wiserver Con		Disable				
08/21/2018 14:13:59 >> Information update has started		Allow Reset -		NO				
08/21/2018 14:13:59 >> Testing communication successful		Device IP:	teatore.	NO IP				
AT OK		Bemote Serve	10	192 168 1				
08/21/2018 14:14:01 >> Request device information successful. AT&C Witech USA					.1			
GP3v1 1.0.2 08-15-2018		Supply Voltag	9.	11.97 V				
		Model:		GP3v1.04				
+VSUPPLY:11.97 V +SM:INSERTED		Manufacturer		WITECH	JSA			
+CSD:0.0		Rimware Vers	ion:	+GMI:WIT	TECH USA			
+BANDSEL:0		IMEI:		01428400	0087233			
+BAND:NO SERVICE +IMEI:014284000087233		Device Date-	lime:	Error readi	ng value			
+GMR:v1.0.2.08/15/18.09:06:00		SIM Card Stat	US:	INSERTE	0			
+GMI:WITECH USA		Wiserver Moc	em ID	2				
+GMM:GP3v1.0.4G		Wiserver Mas	er ID	1				
+TIME:Tue;08/21/18;14:14:00 +WAKE:1.08/21/18;15:00:00:1.60:300:1		Wiserver Fam		3				
+WAKE:2,08/21/18,15:00:00,1,60,300,1		wiserver ram	IY ID	3				
+WAKE:3,08/21/18,15:00:00,1,60,300,1								
+WAKE 4,08/21/18,15:00:00,1,60,300,1 +WAKE 5,08/21/18,15:00:00,1,60,300,1								
+WAKE ST1.Disable				-				
+WAKE_ST:2,Disable		Operational	band:	Automatic			~ >	⊳
+WAKE_ST:3,Disable +WAKE_ST:4,Disable								
+WAKE_ST:5,Disable	~	09 D	/Write mod				Rese	e

WT – GP3 - V1 as Server TCP

From factory, the WT – GP3 - V1 3G is set up by default as Server TCP. Nevertheless, a few configurations must be done in order for this process to be executed correctly: *APN and Listening Port*.

This type of parameters can be configured in the **General Settings** Tab.

1. In the **Access point name** section, the Sim Card operators APN can be configured. Make sure to correctly type the **Name**, **User**, **and Password**.

To set these parameters, please send the changes by clicking on the green triangle in the bottom right corner.

2. To configure the TCP Listening Port, go to the **Connection Settings tab** and select the **TCP Listening Port** parameter and type it in or use the arrows to configure the correct value.

To send these changes, click on **Send All Settings** in the right bottom corner. When clicking this button, all parameters that have been chosen will be sent to the modem.

Wiserver settings			Access Point							
Modem ID:	2	•	lame: Jser:	internet movi	star.com.co		_			
Master ID:	1	141	assword:	movistar movistar						
Family ID:	3						_		>	<u> </u>
	3		GPS setti	ings						
Wiserver connection:	Inactive	~	Location: (GPS	time sinchronization:	Operati	on m	ode: Intermittent		
Connection settings			Type: GF	PS		Time zo	ine:	+0		
Remote Server IP:	192.168.1.1							-		
Remote Server Port:	1010	-	GPS update	timeout: 60	Min			Show la	st loc	ation
TCP Listenning Port:	3030		Scheduler							
	1000	_	Status	Description	Date-Time	Event type		Connection mode		Inte
Connection idle timeout:	5 🗘	Min		Wake # 1	08/22/18 16:00:00	Hourty	~	Server	~	60
Connection timeout:	10 🜲	Min		Wake # 2	08/22/18 16:00:00	Hourty	~	Server	~	60
Serial port				Wake # 3	08/22/18 16:00:00	Hourty	~	Server	~	60
				Wake #4	08/22/18 16:00:00	Hourty	~	Server	~	60
Serial port standard:	RS-232	~		Wake # 5	08/22/18 16:00:00	Hourty	~	Server		60
Serial port configuration:	8N1	~	<							
	Set serial port		Retries							6
	configuration		Master n	De	lay (Min): 5	÷	Retrie	w 1		1
Other settings			Master n	node be	ay (mai).	×.	neui	18.		1
Hexascii reply:	isabled	~	Slave m	ode De	lay (Min): 1	*	Retrie	2	1	
Set device date:	8/22/2018 15:11: ~	3] Reset and	restore:	Modbus TCP to se	erial converte	r: (Leds: Enabl	led	•

A pop-up notification window will appear requesting to confirm these changes.



At the Home tab, you can verify that all changes were successfully made and that the modem is already configured with that Listening Port.

> 08/22/2018 15:09:45 >> Command sent: Set device APN 08/22/2018 15:09:45 >> Command Sent - Response: AT+APN= 1,"internet.movistar:.com.co","movistar", "movistar" + APN: 1,"internet.movistar.com.co","movistar","movistar"

OK

Please Wait: Setting Server ...

LISTEN: 100.69.222.213/3030:TCP

-- AT Command Ready --

WT – GP3 - V1 3G as Client TCP

The first step for the modem WT – GP3 - V1 3G to work as Client TCP is to configure it as Server TCP; as described in the previous section.

Once the APN and TCP Listening Port have been configured, and with this, a successful connection to the Sim Card Operator network.

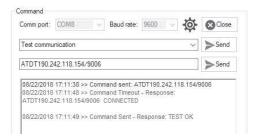
Next, two parameters are needed in order to make a call/connection as client TCP: the server IP Address (**Remote Server IP**) where the connection is directed to and the Listening Port (**Remote Server Port**).

Please follow the following steps to quickly stablish a connection a client TCP:

1. Click on the **Home** tab and look for the **Type custom command** section. In this section you can type in valid commands for the WT – GP3.

2. Type in **ATD**RemoteServerIP/RemoteServerPort and click **Send**.

If the Remote Server is listening and all validations between IP are accepted by the network, it will successfully connect. This can be viewed when the message **CONNECTED** appears.



Note: the WT – GP3 - V1 3G has been designed in order to offer multiple functionalities that are not included in this quick set-up guide.

For any other type of connections like client TCP; alarm calling, events and/or automatic reports, the values of the Listening Port and Remote Server IP can be configured in the **General settings** tab, **Connection Settings** section, **Remote Server Port** and **Remote Server IP** parameters.

🕅 Home 🔳 Modbus data 🕻	Inputs/Outputs	🔅 Genera	al settings 🤾	۵¥ ،
Wiserver settings			Access P	oin
Modem ID:	2	*	Name:	
Master ID:	1	*	User: Password	
Family ID:	3	*	GPS	setti
Wiserver connection:	Inactive	~	Location	(
Connection settings			Type:	G
Remote Server IP:	192.168.1.1		GPS upo	lata
Remote Server Port:	1010	÷	GI U Upu	ruel G
-	3030		Schedule	r
TCP Listenning Port:	3030			

We want to help!

Our team is available for all technical support. Please visit our website or call us at any time:





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