



GRP-530M

Quick Start

Package Checklist

The package includes the following items:

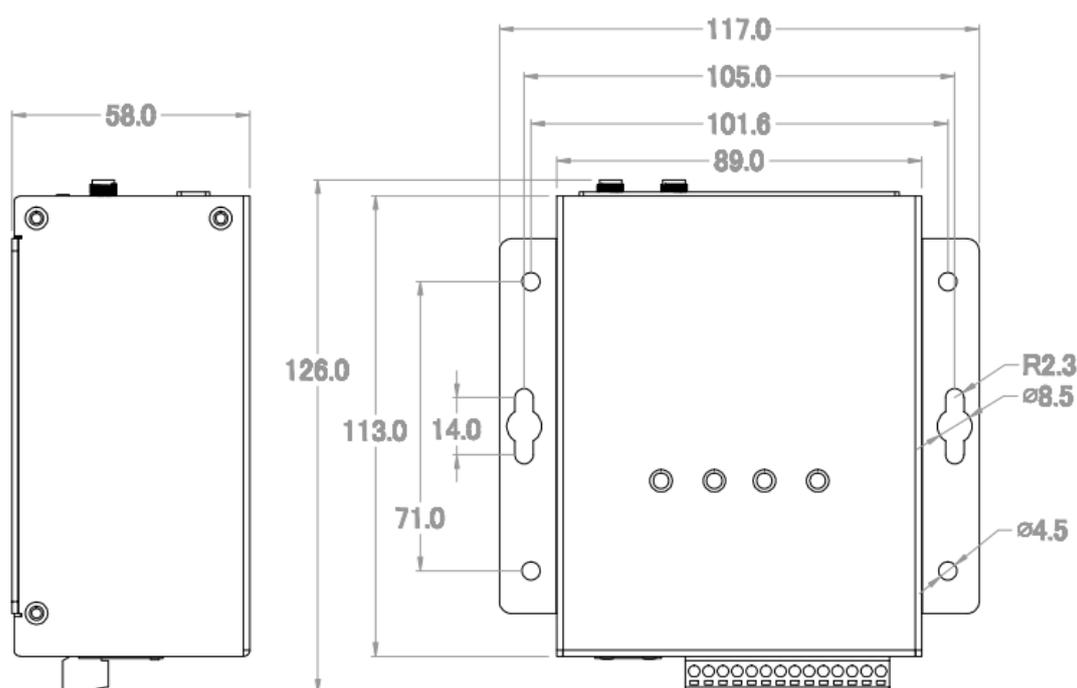
- One GRP-530M hardware module
- One Quick Start
- One RS-232 cable (CA-0910)
- One 2G/3G antenna (ANT-421-04)
- One GPS antenna (ANT-115-03)
- Screw Driver

Related Documents and Software Utilities

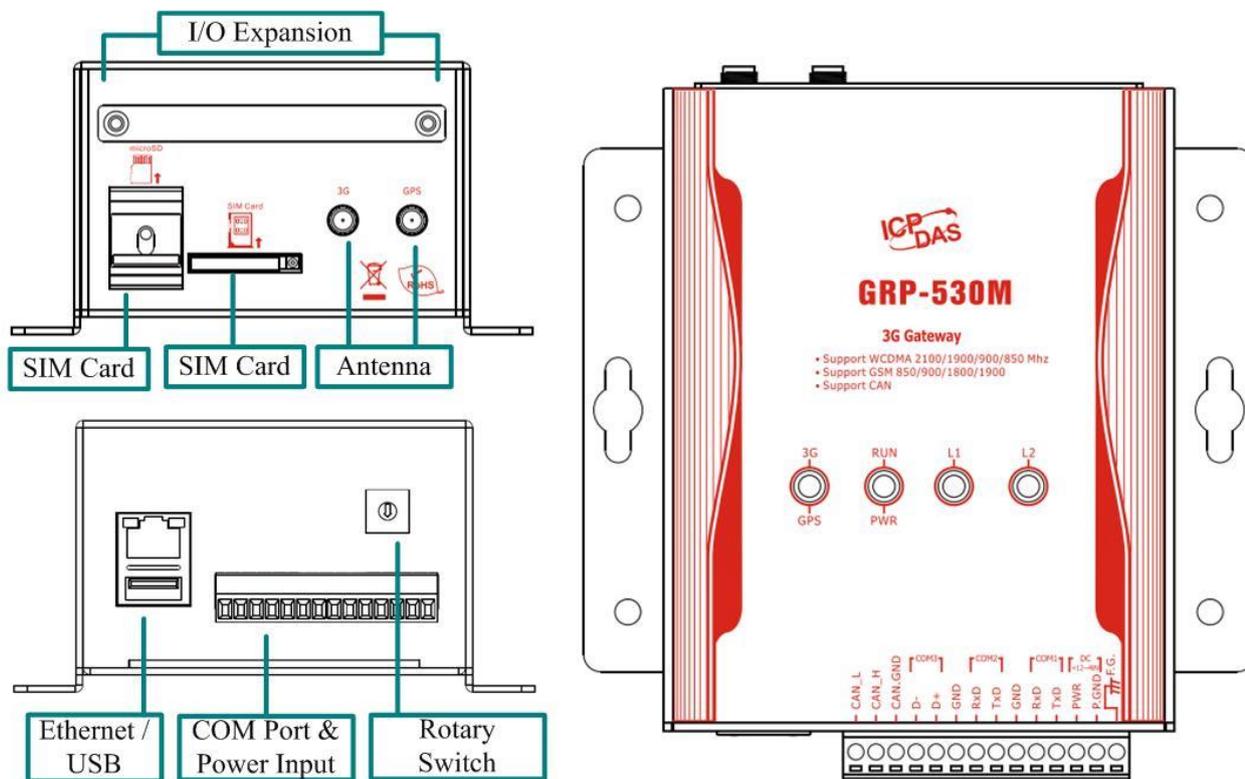
Documents

- User Manual: GRP-530M_User_Manual.pdf
- Quick Start: GRP-530M_QuickStart.pdf
- <http://ftp.icpdas.com/pub/cd/usbcd/napdos/GRP-530/manual>

➤ GRP-530M Dimensions (Unit: mm)



➤ Appearance and Pin Assignments



COM Port & Power Input		
Terminal No.		Pin Assignment
Power	01	F.G.
	02	P.GND
	03	PWR
COM1	04	TxD1
	05	RxD1
	06	GND
COM2	07	TxD2
	08	RxD2
	09	GND
COM3	10	D+
	11	D-
CAN	12	CAN.GND
	13	CAN_H
	14	CAN_L

➤ LED indicators

- A. PWR(Green) : Power LED to indicate whether the external power is input or not. The description is as follows:

The external power is active	The external power is not active
on	off

- B. RUN(Red) : RUN LED indicates if the OS is normal or fail.

Normal	Fail
Heart beat (1 sec.)	Always ON or OFF

- C. L1(Green/Red) : this Led indicates the status of RTU Client.

Normal	Fail
500ms ON / 500ms OFF	Always ON or OFF

- D. L2(Green/Red) : reserve.

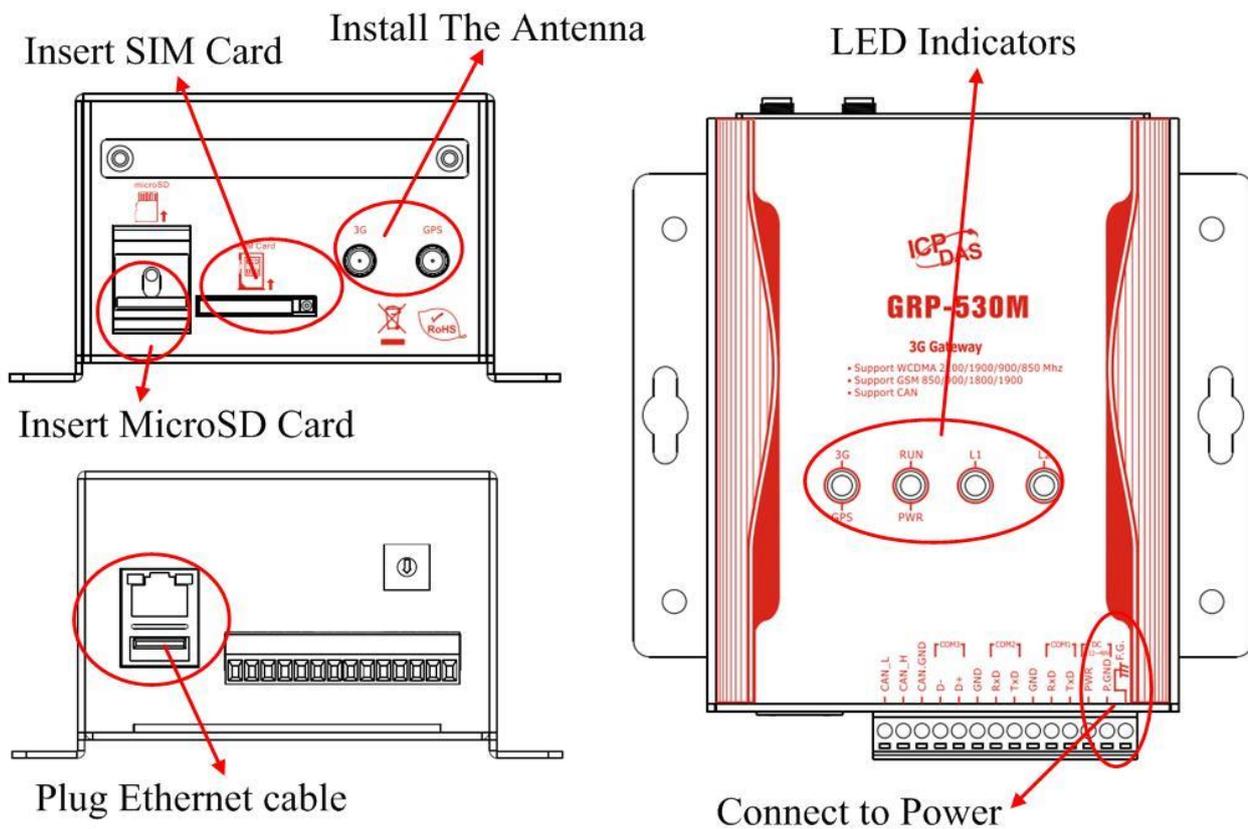
- E. 3G (Red) : The LED indicates the status of 3G module.
(the 3G module need about 60 seconds to register network usually)

Registered	3G/GPRS data transmit	Not Register
800ms ON / 200ms OFF	200ms ON, 200ms OFF	200ms ON / 800ms OFF

➤ Installation

If users want to start GRP-530M normally, it needs to follow these steps to install the GRP-530M below:

- F. Install the antenna
- G. Plug in the normal SIM card (Before apply the SIM card, confirm it is OK by mobile phone.)
- H. Plug the Ethernet cable if you need it.
- I. If you want to use the Micro SD card, please insert it into the slot.
- J. Turn the rotary switch to 0 (normal mode). The COM1 will be the console in position 1 (debug mode), and the default username is “root”, default password is “root”.
- K. Connect the DC.+VS and DC.GND to the power supply.
- L. It is needed to wait about 20 ~ 30 seconds for OS booting. After finishing the process, GRP-530M would be in normal operation mode and the OS LED would blank as heart beat per 1 sec.
- M. It is needed to wait about 30 ~ 60 seconds to search the 3G/2G base and register to the ISP. After finishing the process, the 3G LED would blank per 1 sec.



➤ Web Utility

1. Login

Default username = “admin”, and default password = “admin”

Default IP = “192.168.255.1”

Default Mask = “255.255.0.0”

After login, the screenshot is showed as below:

The screenshot displays the ICP DAS web utility interface. On the left is a navigation menu, and on the right are several data tables.

Information	--Device Info --Network Info --Storage Info
Network	--Ethernet --WLAN --PIN / APN --Network Reconnection --DNS --DDNS Client --DHCP Server --Routing --Diagnostic --Reset Network
System	--Password --Reboot --Reboot Timer --Backup/Restore --Restore Factory --Time
VxServer	--VxServer
RTU Client	--RTU Client --FTP Test --Email Test --Modbus Test
RTU CAN Client	--Basic config --CAN config --FTP/Email

Ethernet	
Mode	static
MAC address	68:c9:0b:7c:37:89
IP Address	192.168.255.1
Mask	255.255.0.0

WLAN information	
Mode	Closed

Mobile Network information	
Status	connected
IP Address	10.102.28.75
P-t-P	10.64.64.64

Modem information	
IMEI	861075022019632
PIN Code	+CPIN: READY
Register Status	Registered
Signal Quality	40%

GPS information	
GPS Status	GPS is not ready
GPS Data	SGPRMC,,V,,,,,,,,,N*53

2. Ethernet

This page provides the basic settings of Ethernet:

Ethernet	
IP Address	<input type="text" value="192.168.27.31"/>
Mask	<input type="text" value="255.255.0.0"/>
Gateway	<input type="text" value="192.168.0.254"/>
<input type="button" value="Modify"/>	

- (1) IP Address: IP of Ethernet.
- (2) Mask: the Mask of the gateway.
- (3) Gateway: IP of the gateway.

3. 3G Configure

This page provides basic settings of 3G network.

2G/3G Configure	
PIN Code	<input type="text" value="0000"/>
Phone Number	<input type="text" value="*99***1#"/> (1)
APN	<input type="text" value="internet"/> (2)
User Name	<input type="text"/> (2)
Password	<input type="text"/> (2)
<input type="button" value="Modify"/>	
(1): usually use *99# or *99***1#	
(2): please ask your SIM Card provider	

- (1) PIN Code: PIN Code are 4 character number provided by SIM Card provider
- (2) Phone Number: usually fill it as “*99***1#” or “*99#”. The number is depended on SIM Card provider
- (3) APN: Access Point Name, please ask your SIM Card provider.
- (4) User Name: the username for dial-up. Please ask your SIM Card provider.
- (5) Password: the password for dial-up. Please ask your SIM Card provider.
- (6) Auto-Dialing: Enable this function to dial-up to 3G network after power on.

4. Routing

This page provides routing rule configuration.

ROUTING Rule			
Rule NO.	IP	Mask	Target
0	192.168.27.1	24	ppp0
1			
2			
3			
4			
5			
6			
7			
8			
9			

- (1) IP: IP address.
- (2) Mask: the mask will effect how many IP this rule manages.
"24" = 255 IPs, "28" = 16 IPs, "32" = 1 IPs.
- (3) Target: the target interface of the rule.
- (4) For example:

The Rule 0: This rule will push the socket packages from the address 192.168.27.1 ~ 192.168.27.255 forward to "ppp0" (3G network).

5. Port Mapping (Port Forward)

This page provides Port Mapping rule configuration.

Port Mapping Rule					
Rule NO.	Type	From	Port	Target IP	Target Port
0	TCP	ppp0	10080	192.168.27.140	80
1					
2					
3					
4					
5					
6					
7					
8					
9					

Modify

- (1) Type: the protocol type. There are “TCP” and “UDP”
- (2) From: the interface that the socket comes from.
”ppp0” is 3G interface.
- (3) Port: the port that the socket comes from.
- (4) Target IP: the IP that the socket goes forward.
- (5) Target Port: the Port of the “Target IP”.
- (6) For example:
The Rule 0: This rule will bind the socket from the “ppp0” and Port=”10080” with 192.168.0.10:80.

6. Password

The user can change the password of the web utility here.

Change Password	
New Password	<input type="text"/>
Confirm	<input type="text"/>
<input type="button" value="Modify"/>	
The length of password must be more then 4 characters that limited in a~z, A~Z, 0~9.	

- (1) Password: new password.
- (2) Confirm: confirm the password again.

7. The advance settings of web utility

Please refer the user manual of GRP-530M.

➤ Technical Support

1. ICP DAS Service : [**service@icpdas.com**](mailto:service@icpdas.com)
2. GRP-530M software Website:
<http://m2m.icpdas.com/GRP-530M.html>