

GRP-530M/GRP-540M FAQ

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Q01: If we forget the IP of device, how to find the IP?

A01:

About this question, we have two solutions - "Rotary Switch" and "UDP Search".

1. Rotary Switch:

First, you can see the photo below. Please rotate the Rotary Switch to the position "9" and reboot the GRP product.



① After that, we can use the default IP address - "192.168.255.1" to access web page.

② Click the "Ethernet" option on the left side to enter the configuration page.

③ In here, we can see the GRP product's IP address and other network configuration.

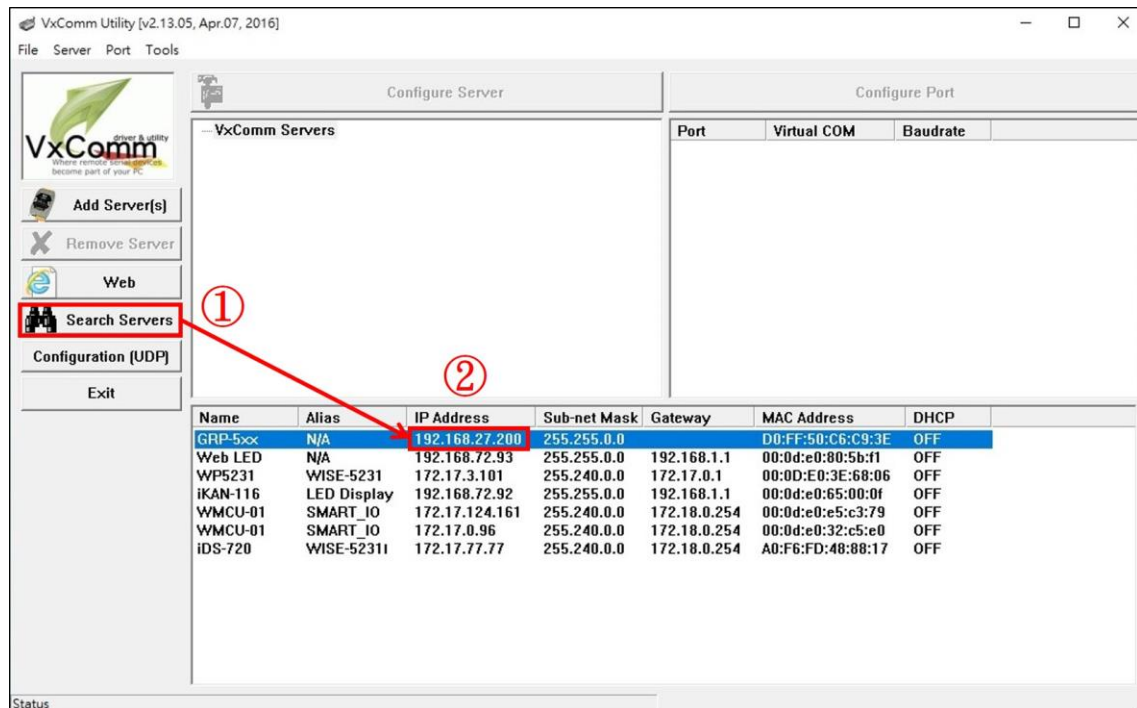
Ethernet	
IP Address	192.168.27.200 ③
Mask	255.255.0.0
Gateway	
Modify	

After you get the GRP product's IP address, you can rotate the Rotary Switch back

to the position "0" and reboot the system. Now, we can use the IP address to access web page.

2. UDP Search:

In the GRP products' system, we have a program which is used for UDP Search. This program can response the network setting about the GRP product. We can use any software which have UDP Search function to find the GRP product's IP address. In here, we'll use "VxComm Utility" software to find the IP address.



- ① In the VxComm Utility, please click "Search Servers" button on the left side. After push the button, it'll search all of devices which exist in the same network and have UDP Search function.
- ② After that, we can see the GRP device - "GRP-5xx" shows up. The information in the same row is about the GRP device's network setting and the "IP Address" field is the GRP device's IP address. Therefore, we can use this IP to access GRP's web page now.

Q02: How to get the GPS data of GRP device?

A02:

1. Get data from the GRP's config page:

Please open GRP's config page and click "Network Info", it will display as below:

Ethernet	
Mode	static
MAC address	2c:6b:7d:43:5f:ac
IP Address	192.168.27.200
Mask	255.255.0.0

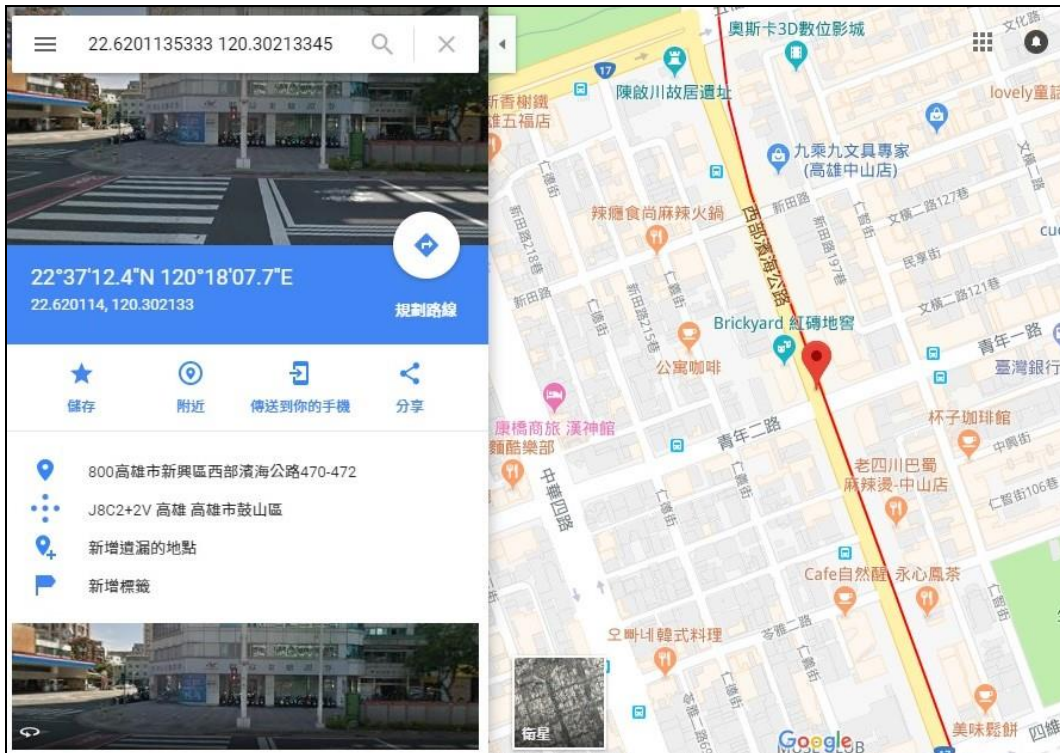
WLAN information	
Mode	Closed

Mobile Network information	
Status	connected
IP Address	100.77.57.128
P-t-P	10.64.64.64

Modem information	
IMEI	861107030276449
PIN Code	+CPIN: READY
Register Status	Registered
Signal Quality	90%

GPS information	
GPS Status	GPS is ready, @(22.6201135333, 120.30213345) --> show map
GPS Data	\$GPRMC,085548.00,A,2237.206812,N,12018.128007,E,0.0,181.8,111218,2.8,W,A*2E

In Network Info page, there have GPS Status and GPS Data in the GPS information block. The GPS Data field shows original "\$GPRMC" information which defined by NMEA 0183 protocol, it contains Latitude info, Longitude info, and the data is valuable or not. In the GPS Status field, the data that has been explained and a connection to Google Map will show up.



2. Get data from RTU Center:

By the RTU client function, the GPS data and all I/O data will be transmitted to RTU Center. In the RTU Center, user can see original "\$GPRMC" info in the "Local IO" page.

M2M RTU Center

File Settings Help

GRP

- Local IO
- 1_ET-7002
- 2_ET-7016

Parameter	Status
Modbus Module Name	Local IO
Modbus Slave ID	255
Date&Time	2018/12/11 17:45:45
DI Count	0
DO Count	0
AI Count	0
AO Count	0
Counts	0
Data Valid	1
GPS	\$GPRMC,V,,,,,N*53

Date / Time	Message
2018/12/11 17:45:39.637	Station [1] established the connection!!(GPRS) (IP: 192.168.27.200, PORT: 58088)
2018/12/11 17:45:39.637	Station [1] established the connection!!(GPRS) (IP: 192.168.27.200, PORT: 58088)
2018/12/11 17:43:37.764	Add a new device "GRP" (Station ID=1)
2018/12/11 17:42:56.274	Server Started (Local IP: 192.168.12.48, Local PORT: 10000)

When connecting to database via RTU Center, the database will create three

tables--“station_data_comm”, “station_data_modbus”, and “station_last_record”. The GPS data will be stored in “station_data_comm” and “station_last_record”, users can access the database and get GPS data from this two tables according to their application.

- The data in the “station_data_comm” table: store all historical data

station_id	priority	connect_interface	date_time	modbus_device_number	sd_error	gps_data
2	2	GPRS	2018-11-06 11:15:29	9	0	\$GPRMC,,V,,,,,,,,,N*53
2	2	GPRS	2018-11-06 11:15:32	9	0	\$GPRMC,,V,,,,,,,,,N*53

- The data in the “tation_last_record” table: only store last data

station_id	gps_data	io_data	date_time
2	\$GPRMC,,V,,,,,,,,,N*53	255;;;#1;;;65408#1;;;0,0,0,0,0,0#1;;;207,339,1...	2018-12-11 17:49:48

Q03: How does the GRP-540M registered via a public IP SIM card?

A03:

1. Setting PIN Code
2. Setting APN, User Name, Password(Provided by ISP).

PIN / APN Configure	
PIN Code	0000
Phone Number	*99***1# (1)
APN	(2)
User Name	(2)
Password	(2)
Modify	
(1):usually use *99# or *99***1#	
(2):please ask your SIM Card provider	

3. Check the Modem information(PIN Code: +CPIN: READY, Signal Quality).

Modem information	
IMEI	866 [REDACTED]
PIN Code	+CPIN: READY
Register Status	Registered
Signal Quality	68%

Note : Signal Quality recommends more than 60%

4. Waiting for Status connected and getting IP.

Mobile Network information	
Status	connected
IP Address	211 [REDACTED]
P-t-P	10. [REDACTED]

5. Ping test to check GRP-540M-NB is connected to the network.

```

C:\> 命令提示字元
Microsoft Windows [版本 10.0.17763.805]
(c) 2018 Microsoft Corporation. 著作權所有，並保留一切權利。
C:\Users\Tim>ping 211.....2

Ping 211.....2 (使用 32 位元組的資料):
回覆自 211.....2: 位元組=32 時間=94ms TTL=56
回覆自 211.....2: 位元組=32 時間=35ms TTL=56
回覆自 211.....2: 位元組=32 時間=39ms TTL=56

211.....2 的 Ping 統計資料:
    封包: 已傳送 = 3, 已收到 = 3, 已遺失 = 0 (0% 遺失),
    大約的來回時間 (毫秒):
        最小值 = 35ms, 最大值 = 94ms, 平均 = 56ms
    
```

Q04: Why can't GRP-540M reconnect to Server after disconnection?

A04:

The mobile network is not stable, so you need to enable the Reconnection function. This function will try to reconnect according to the "Retry Interval Time" and "Max. Retry" parameters.

Network Reconnection	
Server IP	8.8.8.8
Max. Retry	5
Retry Interval Time	30
Enable Function	<input checked="" type="checkbox"/> Enable
Modify	
(1):This function will run immediately after you press "Modify" button (2):GSM module will be reset after Max. retry (3):System will reboot after GSM module reset 100 times	

Note : If you use MDVPN that the "Server IP" cannot set public IP(ex. 8.8.8.8).

Q05: How to connect 2 PC via MDVPN?

A05:



1. Make sure the SIM card is workable(Getting IP).
2. Setting IP.

Ethernet	
IP Address	10.4.10.200
Mask	255.255.0.0
Gateway	
Modify	

3. Setting Routing rule.

ROUTING Rule			
Rule NO.	IP	Mask	Target
0	10.4.10.1	24 ▼	ppp0 ▼

4. Reboot GRP-540M.

Note : Why does the GRP-540M-4GE's Ethernet IP not use 192.168.x.x?

If you use the same IP network segment as the ISP, it may result in failure to connect properly.