



# GRP-540M-NB Quick Start

v1.0.0, 2018

## What's in the box?

In addition to this guide, the package includes the following items:



**GRP-540M-NB**



**Quick Start**



**Screw Driver (1C016)**



**CA-0910**



**ANT-421-04**



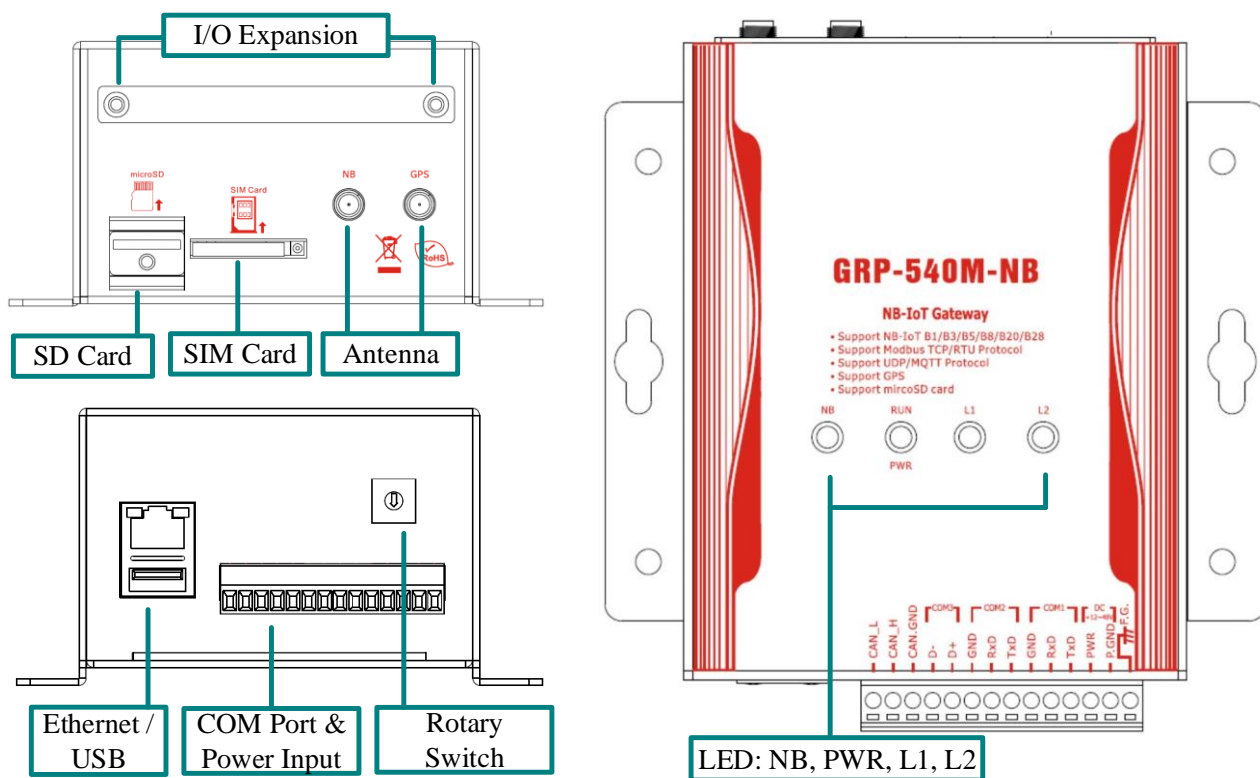
**ANT-115-03**

## Related Documents and Software Utilities

### Documents

- User Manual: GRP-540M-NB User Manual EN.pdf
- Quick Start: GRP-540M-NB Quick Start EN.pdf  
<ftp://ftp.icpdas.com.tw/pub/cd/usbcd/napdos/grp-540m-nb/manual/>
- GRP-540M-NB software Website:  
<http://m2m.icpdas.com/GRP-540M-NB.html>

# 1 Appearance and Pin Assignments



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

## 2 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

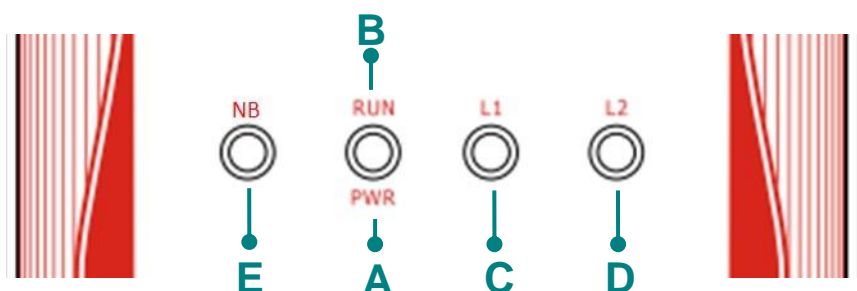
- C. **L1(Green/Red)** : this Led indicates the status of RTU Client.

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

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

- E. **NB-IoT(Green)** : The LED indicates the status of NB-IoT module.  
(the NB-IoT module need about 60 seconds to register network usually)

Registered	NB-IoT data transmit	Not Register
333ms ON / 3000ms OFF	50ms ON, 50ms OFF	500ms ON / 500ms OFF



## 3 Installation

If users want to start GRP-540M-NB normally, it needs to follow these steps to install the GRP-540M-NB below:

- A. Install the antenna.
- B. Plug in the normal SIM card.
- C. Plug the Ethernet cable if you need it.
- D. If you want to use the Micro SD card, please insert it into the slot.
- E. Connect the DC.+VS and DC.GND to the power supply.
- F. Need wait about 20 ~ 30 seconds for OS booting. After finishing the process, GRP-540M-NB would be in normal operation mode and the OS LED would blank as heart beat per 1 sec.
- G. It is needed to wait about 30 ~ 60 seconds to search the NB-IoT base and register to the ISP. After finishing the process, the NB-IoT LED would blank per 3.333 secs.

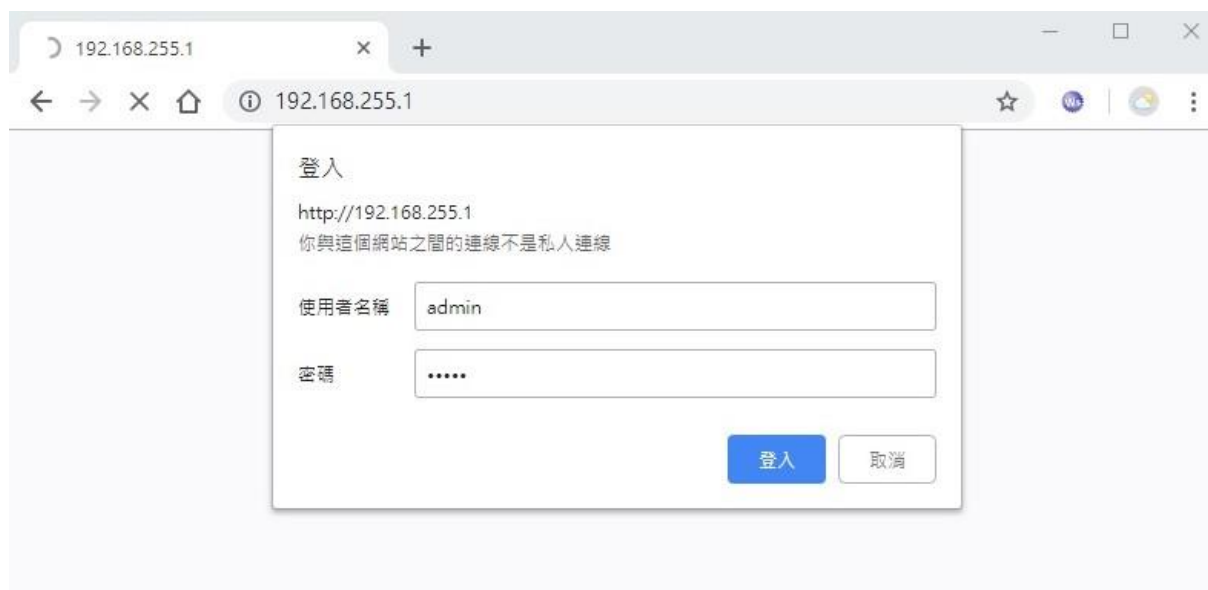
## 4 Web Utility

### 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 with categories: Information (Device Info, Network Info, Storage Info), Network (Ethernet), System (Password, Reboot, Reboot Timer, Backup/Restore, Update, Restore Factory, Time), and NB-IoT Client (NB-IoT Client). The main content area shows three tables of settings:

Ethernet	
Mode	static
MAC address	44:ea:d8:9e:fe:e0
IP Address	192.168.255.1
Mask	255.255.0.0

Modem information (update when sending message)	
NB-IoT Status	NB-IoT Client enable
Register Status	Registered
Signal Quality	75%

GPS information	
GPS Status	GPS is not ready
GPS Data	\$GPRMC,,V,,,,,,,,,N*53

## 2. Ethernet

This page provides the basic settings of Ethernet:

The screenshot shows the Ethernet settings page. It features a table with three rows for configuration, each with a numbered callout:

Ethernet	
1 IP Address	192.168.255.1
2 Mask	255.255.0.0
3 Gateway	

Below the table is a 'Modify' button.

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

## 3. 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.

#### 4. Update

The user can update the device's firmware by themselves. Need to go to the product page and download the update file (updateFile.tarc). Must put the update file into SD card and backup your config before update.

Update
Are you sure to update? It may reset some configure file.
<input type="button" value="Update"/>
(1):Must put "updateFile.tarc" file in SD card. (2):Need to wait several minutes for update. (3):It will reboot after update.

#### 5. The advance settings of web utility

Please refer the user manual of GRP-540M-NB.