# 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)**

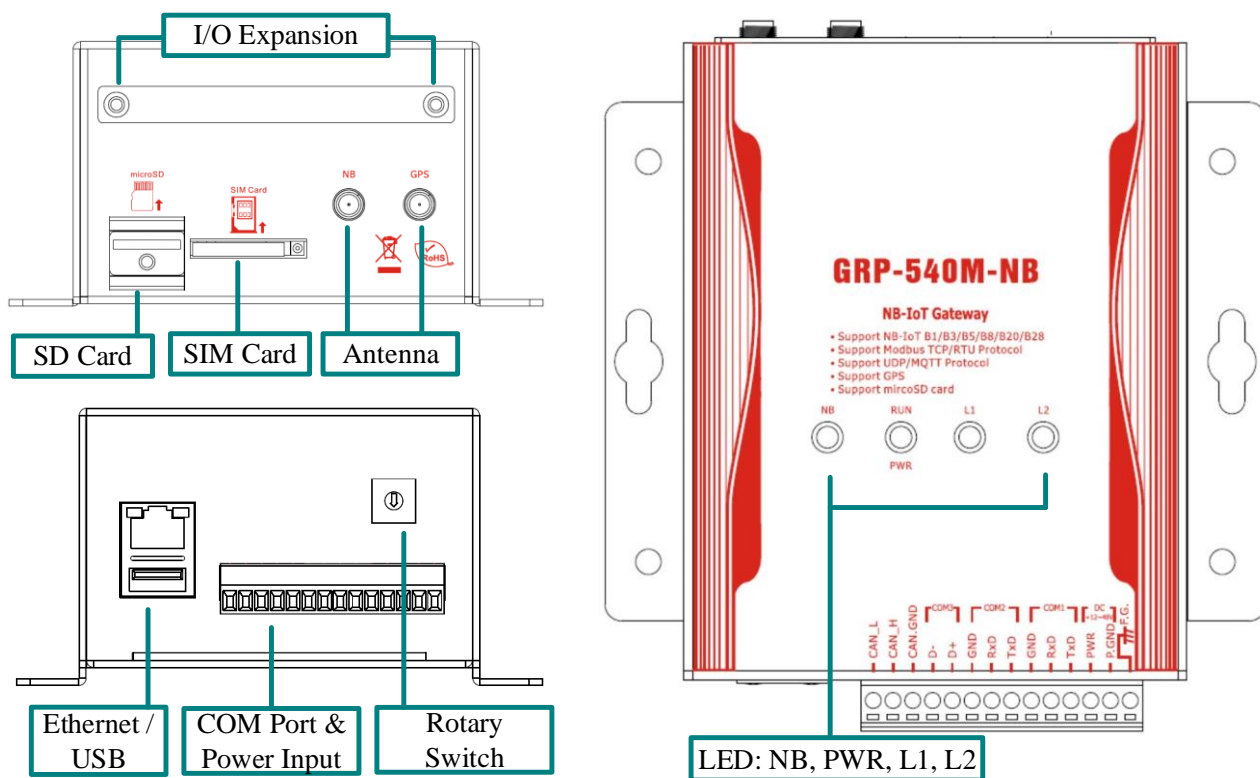**CA-0910**        **ANT-421-04**        **ANT-115-03**

## 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/](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](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 |



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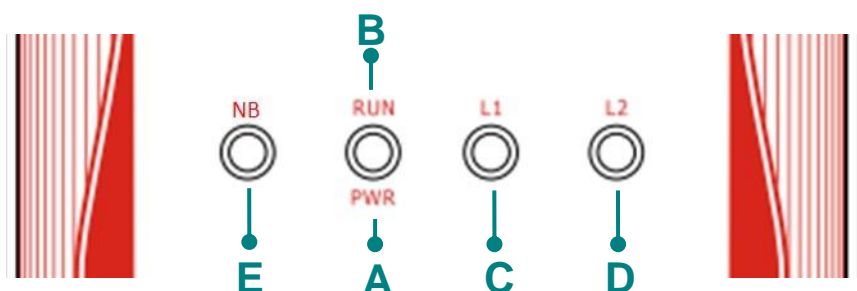
# 3 Installation

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.
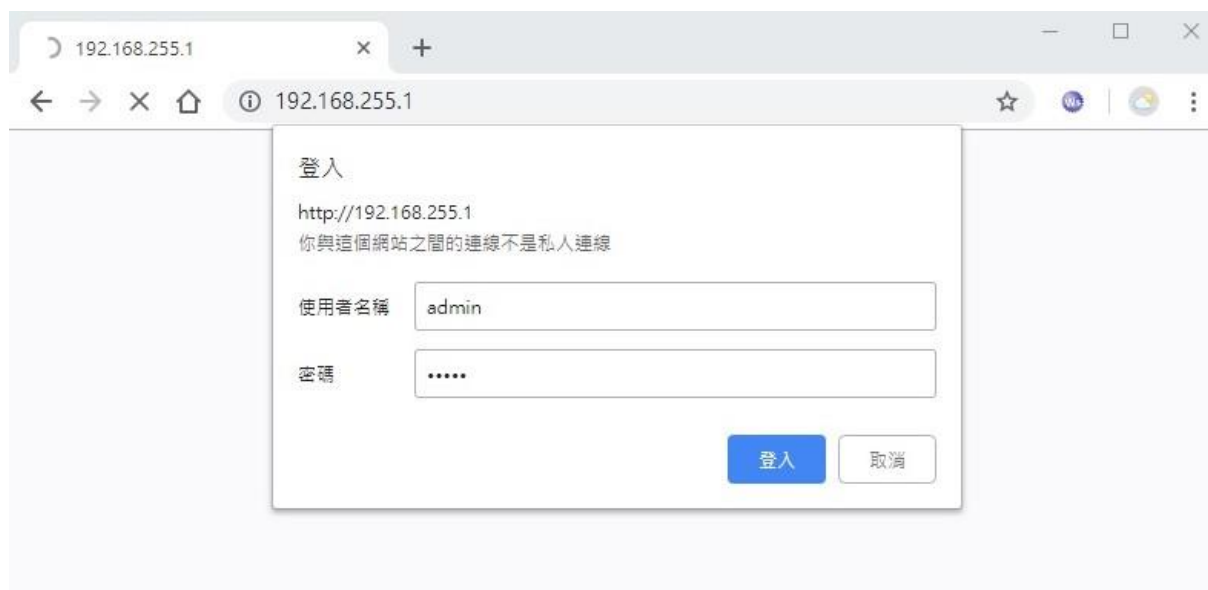
# 4 Web Utility

## 1. Login

Default username = "admin", and default password = "admin"
Default IP = "192.168.255.1"
Default Mask = "255.255.0.0"



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After login, the screenshot is showed as below:



### 2. Ethernet

This page provides the basic settings of Ethernet:



(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 | |
| Confirm | |
| 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 themself. 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. |
| 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.