# GTP-500M
# FAQ



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**Q01: How to confirm my SIM card can support GTP-500M?**

A01:

GTP-500M Frequency Band:
GSM/GPRS(2G System) 850/900/1800/1900 MHz
WCDMA(3G System) 850/900/1900/2100 MHz

Please ask the ISP of your SIM card:
1. Is the SIM card can support above frequency band?
2. The area where the GTP-500M is placed can receive the signal of this band?

Q: Can I use 4G SIM card?
Ans: Yes. Normally, GTP-500M automatically drops to 3G or 2G mode when using a 4G SIM card, but you need to make sure that the device can receive 3G / 2G signal in that area.

**Q02: Why GTP-500M can not register?**

A02:

| | | |
|---|---|---|
| **3G (Green)** | Blinking pre 3 sec | 3G modem normal(2G network) |
| | Twinkling twice per 3 sec | 3G modem normal(3G network) |
| | OFF | 3G modem fail |

- Please confirm the antenna and SIM card are installed correctly.
- Please confirm whether the SIM card can register by phone.
- Please confirm the SIM card by referring to step Q01.
- Please confirm PIN Code setting is correct (Manual: Page.31 - Chapter 4.4.5), or use the phone to unlock PIN Code.
- Use Utility to confirm whether the signal strength is too low (<30%)
  RMV function: Page.29 - Chapter 4.5.1(Manual)
  RTU function: Page.66 - Chapter 5.3.10(Manual)
  SMS funciton: Page.98 - Chapter 6.11(Manual)

**Q03: Do I need to buy an I/O expansion board?**

A03:

RMV function: Not supported.
SMS function: Need I/O expansion board.
RTU function: Optional. GTP-500M will send I/O expansion boaed data to server if it has I/O expansion board. If you only need to receive Modbus data, you do not need to buy it.

Please refer to the bottom of the Website(Accessories).



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**Q04: Do I need to buy a battery box?**

A04:

If you need to have a backup power supply in the event of an unexpected power outage, you can buy the battery box and battery.

Bettary Box: BX-ENEL5-1 CR

※ICPDAS do not provide batteries, please buy batteries other places(Nikon battery ENEL5).

With Nikon battery ENEL5 (3.7V / 1100mAh), the battery is available for about 8.5 hours with I / O information returned and GPS on every 5 seconds.

**Q05: How to switch between different functions (ex. RTU -> RMV)?**

A05:

GTP-500M need to update the firmware to switch between different functions. After updating the firmware, all the settings will be restored to the factory default settings.

We need to prepare:

1. CA-0910 cable



2. Firmware (*.fw)
3. Tool (Firmware_Update_Tool.exe)

Please refer to manual(Page.115 - Appendix A.) to update firmware.

**Q06: Precautions of RTU function.**

A06:

The RTU function has two operation modes and can not be operated at the same time. Please use Utility to change the operation mode.

1. RTU Mode:
   I/O data (including the GTP-500M's I/O, Modbus device I/O and GPS) is regularly sent back to M2M RTU Center through GPRS / WCDMA.
   - Max 3 Modbus Devices.
   - Choose one of Server IP or Server Domain Name.
   - Machine ID can not be duplicated with other RTU devices
2. E-mail Mode:



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I/O data (including the GTP-500M's I/O, Modbus device I/O and GPS) to E-mail attachment regularly back to the mail box.

- Max 3 Modbus Devices.
- Not support SSL(ex. Gmail、Hotmail、Yahoo).
- Support 10 mail address to receive.

**Q07: How many maximum capacity of micro SD does the GTP-500M support?**

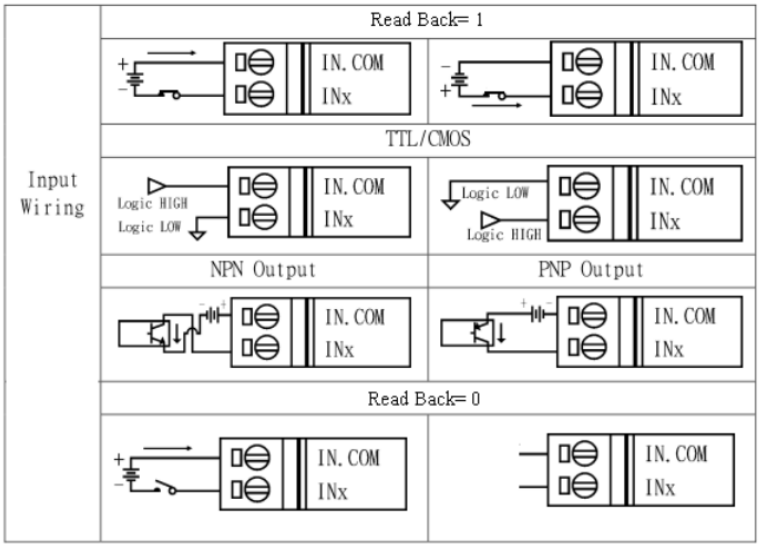
A07:

The GTP-500M supports maximum capacity of micro SD as 8 GB.
(Data format: FAT16 or FAT32)

**Q08: If the counter function of GTP-500M is always error. How does user do?**

A08:

- Please confirm the DI wiring.




- Setting the Counter parameters in Utility.
- Make sure the counter frequency is 5 ~ 40 Hz.

**Q09: How to convert 2 bytes Hex value into a decimal reading for either a more meaningful 4 ~ 20mA?**

A09:

The AI value displayed by the RTU Center is a HEX value that needs to be converted to obtain the actual AI value.

1. Convert the Hex value to Dec value.
   B56(HEX) = 2902(DEC)
2. The AI channel of GTP-500M is 12-bit resolution.
   2902(DEC)/4096 = 0.7085
3. The Input range of GTP-500M is 0~20mA.
   0.7085 * 20 = 14.17 mA

**Q10: SMS Function - What is DTMF?**



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A10:

DO can be controlled via Dual Tone Multi Frequency (DTMF) signals in the GTP-500M SMS function



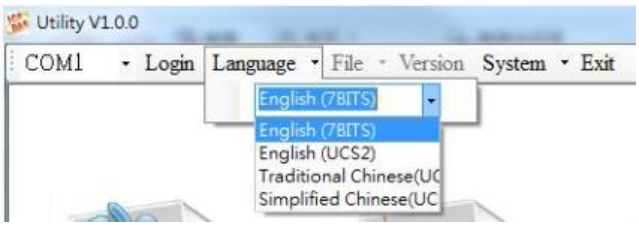

Please refer to the following step:

1. Click the DTMF in Utility.
2. Call the GTP-500M with the specified phone number.
3. Press the keyboard to control DO(Format: Manual Page.114 - Chapter 6.17).

**Q11: SMS Function - Abnormal condition of SMS/Time content.**

A11:

SMS content abnormal:

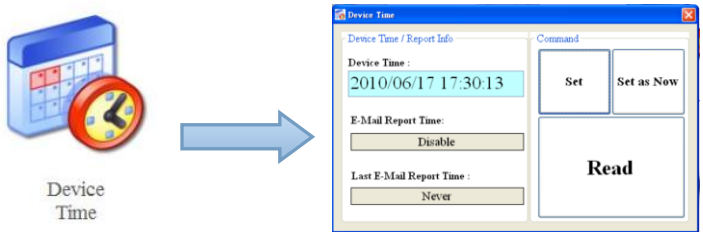



The transmission method of SMS will be determined according to the Utility interface. Please select the suitable language interface.

- English SMS: 7-bits, Max 140 char.
- English SMS: UCS2, Max 70 unicode char.
- Chinese SMS: UCS2, Max 70 unicode char.

SMS Time content abnormal:

- Use Utility to set time.




- If it still wrong after setting with Utility, please contact us.

**Q12: SMS Function - Forgot password.**

A12:

The GTP-500M SMS function need to a password to login (default password is: 111111).

If you forget the password, you can take the following method:

- Send the SMS to GTP-500M to ask the password(Command: @PASS).
- Refer to Q5 to update SMS firmware(return to factoy setting).



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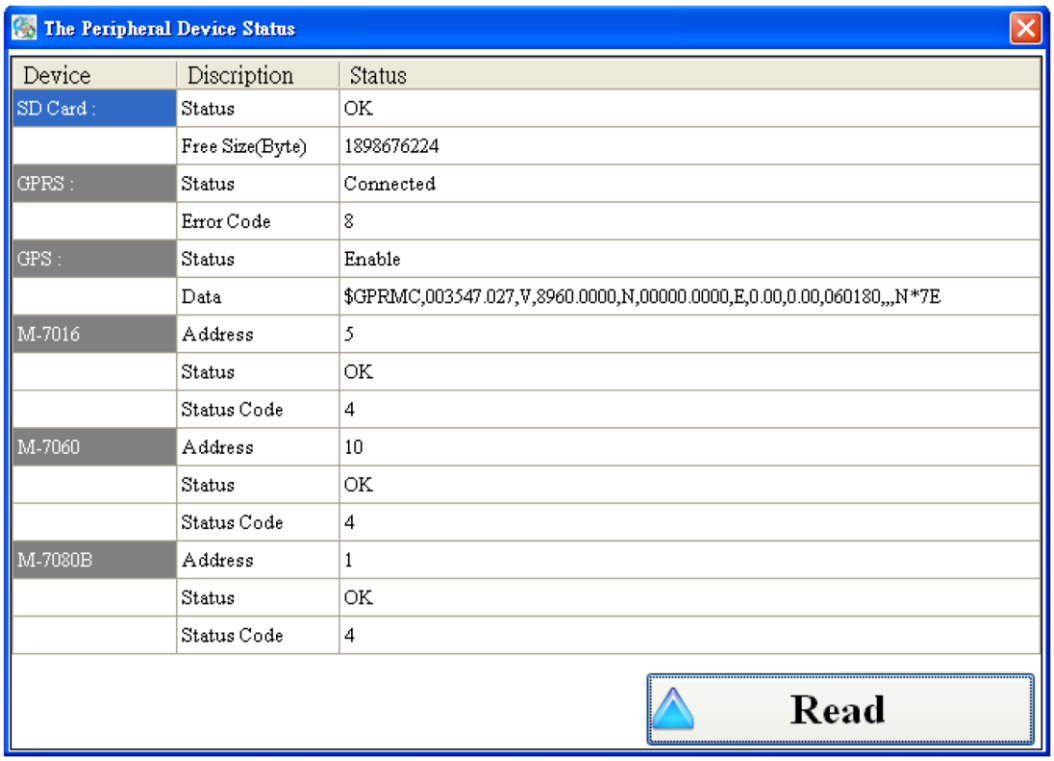
**Q13: SMS Function - I wrote in the Hyperterminal +++hello and pressed enter many times, but the phone could not receive the same number of SMS. why it doesn't work and why sometimes it does work?**

A13:

The GTP-500M will ignore COM Port commands when sending SMS messages. Please wait for 3 ~ 5 seconds between each command interval.

**Q14: RTU Function - The Peripheral Device Status Error Code.**

A14:




| Device | Discription | Status |
|---|---|---|
| SD Card : | Status | OK |
| | Free Size(Byte) | 1898676224 |
| GPRS : | Status | Connected |
| | Error Code | 8 |
| GPS : | Status | Enable |
| | Data | $GPRMC,003547.027,V,8960.0000,N,00000.0000,E,0.00,0.00,060180,,,,N*7E |
| M-7016 | Address | 5 |
| | Status | OK |
| | Status Code | 4 |
| M-7060 | Address | 10 |
| | Status | OK |
| | Status Code | 4 |
| M-7080B | Address | 1 |
| | Status | OK |
| | Status Code | 4 |

GPRS Error Code

- 0：Connect OK
- 2：Module Error
- 3：PIN Code Error
- 4：PUK Code Error
- 5：SIM Card Error
- 6：Dialup Internet Error
- 7：Connect Server Error

Devices Status Code

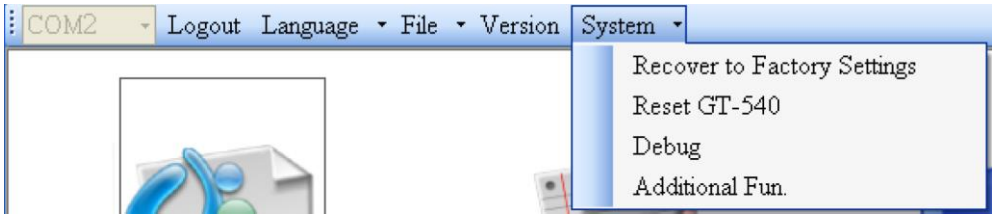
- 248、251、254、1：Devices Timeout(Try to incease Modbus Devices Timeout Parameters)

**Q15: RTU Function - How do I change the Timeout parameter of Modbus Devices?**

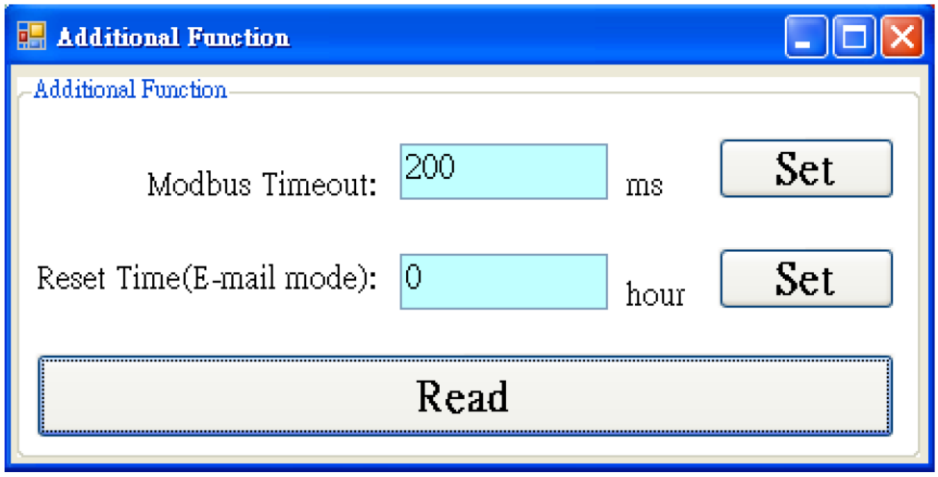


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A15:




Open Utility -> System -> Additional Fun.




※If you increase the Modbus Timeout, it will increase the the transmission time of each packet



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