

# **M2M Series Products**

## **Intelligent GPRS Remote Terminal Unit**

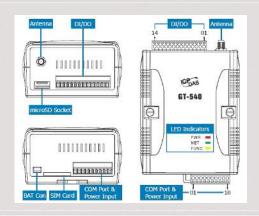








GT-540



**Dimensions** 

The GT-540 is an intelligent Active GPRS Remote Terminal Unit. It can be used in M2M application fields to transfer the local I/O or Modbus device's data via GPRS by the defined period or DI/AI triggers. The local I/O data can also be stored in the SD card to become a remote data logger. In addition, the GT-540 also offers the e-mail mode to transfer the data by e-mail via GPRS for users to choose. With The simple I/O linkage function, the GT-540 can reach the real time control in local field.

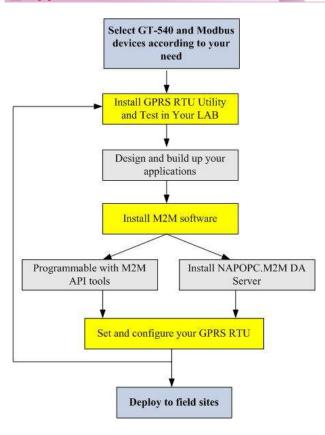
#### Features

- Built-in 32 bit CPU
- COM port: COM1 (5-wire RS232), COM2 (RS-485),
- I/O: 6 channel DI, 2 channel DO, 1 channel AI
- Support Micro SD storage card
- Quad-band 850/900/1800/1900 MHz
- Automatic/continuous GPRS Link Management
- Support Modbus RTU protocol to connect to Max 3 Modbus RTU devices via RS-485 port
- Support I/O data logger file transferring by E-mail
- Support M2M.OPC server and M2M.API tools
- Local I/O linkage function to make the simple local control
- Support 3.7V 600 mAH Li-battery

#### I/O Interface

| I/O | Channel number | Specification  |  |
|-----|----------------|--|--|
| DO  | 2              | Output type : Open-Collector (NPN)<br>Load Voltage: +30V Max. Load Current :<br>100mA Max                            |  |
| DI  | 6              | Input type: Sink or Source, Isolated channel with common power or ground On Voltage: +3.5V~+30V Off Voltage: +1V Max |  |
| AI  | 1              | Resolution : 12-bit<br>Input Range/Type : 0~20mA<br>Sample Rate : 1KHz Max   |  |

#### **Application flow chart**



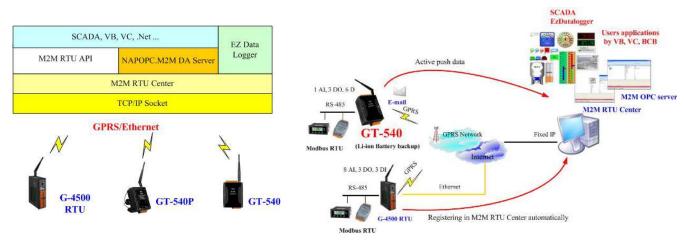


## Hardware Specifications

| System             |   |  |  |  |  |
|--------------------|---|--|--|--|--|
| CPU                | 32 bit, Microprocessor inside   |  |  |  |  |
| RTC                | Gives time(sec, min, hour) & date   |  |  |  |  |
| WDT(watchdog)      | Yes   |  |  |  |  |
| Micro SD interface | 2GB max.  |  |  |  |  |
| Comm. Interface    |   |  |  |  |  |
| COM ports          | COM1: TxD,RxD,GND for configuration; COM2: RS-485;  |  |  |  |  |
| GPRS Interface     |   |  |  |  |  |
| Frequency Band     | Quad-Band 850/900/1800/1900 MHz; GPRS multi-slot : class 10/8                                   |  |  |  |  |
| GPRS connectivity  | GPRS class 10; GPRS station class B; GPRS class 10  |  |  |  |  |
| DATA GPRS          | Downlink transfer:max 85.6 kbps; Uplink transfer: max 42.8kbps                                  |  |  |  |  |
| General            |   |  |  |  |  |
| Power Requirement  | 2W; Unregulated +10V <sub>DC</sub> ~ +30V <sub>DC</sub> . Support 3.7V Li-battery backup        |  |  |  |  |
| LEDs               | 3 indicator LEDs  |  |  |  |  |
| Environment        |   |  |  |  |  |
| Operation Temp.    | Operation : $-25^{\circ}$ C to $75^{\circ}$ C; Storage Temp : $-40^{\circ}$ C to $80^{\circ}$ C |  |  |  |  |
| Humidity           | 5~95% non-condensing  |  |  |  |  |
| Dimensions         | 91mm x 132mm x 52mm (long*width* high)  |  |  |  |  |

| LED          | Description |                                     |                  |                    |  |
|--------------|-------------|-------------------------------------|------------------|--------------------|--|
| EVT(rod)     | on          | The external Power is active        |                  |                    |  |
| EXT(red)     | off         | The external Power is not active    |                  |                    |  |
| STA (orongo) |             | Normal                              | GSM Fail         | PIN code is wrong  |  |
| STA (orange) | EXT (on)    | Blanking (1 sec)                    | Always on or off | Blinking per 50 ms |  |
| GSM(graan)   | Blinking    | Modem normal                        |                  |                    |  |
| GSM(green)   | off         | Modem fail (or Blinking(not 3 sec)) |                  |                    |  |

## Applications



### **Ordering Information**

GT-540 CR Intelligent GPRS Remote Terminal Unit (RoHS, include: 2G micro SD card)