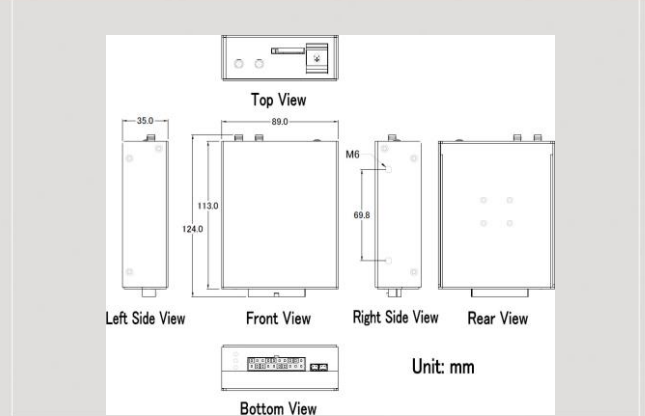




## Intelligent 3G Remote Terminal Unit with GPS



RTU-531PM



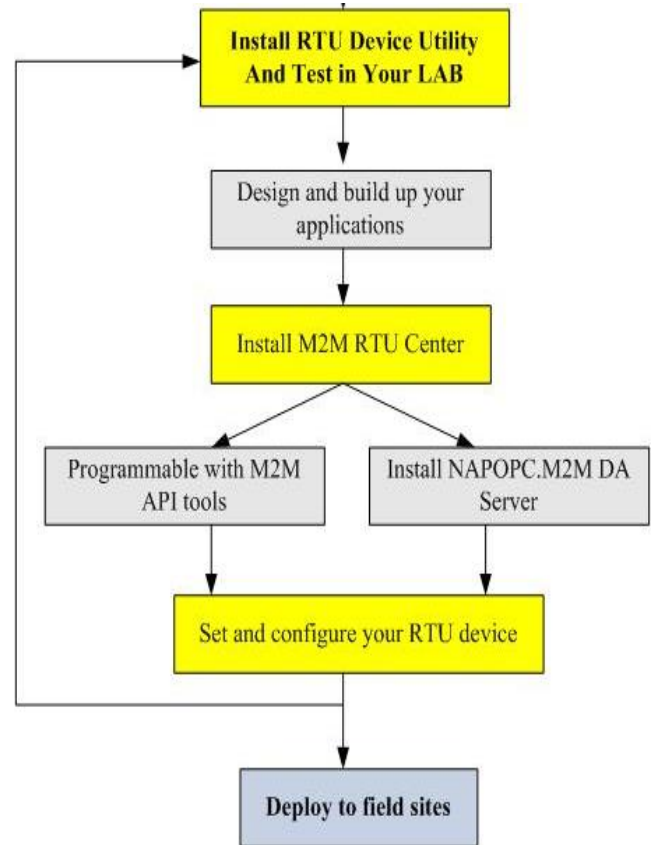
Dimensions

RTU-531PM is an intelligent 3G Remote Terminal Unit with GPS. It can be used in M2M application fields to transfer the local I/O and GPS data via WCDMA/GPRS by the defined period or DI/AI triggers. The local I/O and GPS data can also be stored in the micro SD card to become a remote data logger. With the simple I/O linkage function, RTU-531PM can also reach the real time control in local field.

### Features

- Built-in 32 bit CPU
- COM port: COM1 (3-wire RS232)
- I/O: 4 channel DI, 2 channel DO, 4 channel AI, 2 channel thermistor inputs
- Support SD storage card
- GSM Frequency : 850/900/1800/1900 MHz
- WCDMA Frequency : 850/900/1900/2100 MHz
- Automatic/continuous WCDMA/GPRS Link Management
- Support M2M.OPC server and M2M.API tools
- Local I/O linkage function to make the simple local control
- Support GPS function
- Power supply +10 ~ +30 V<sub>DC</sub>

### Application flow chart



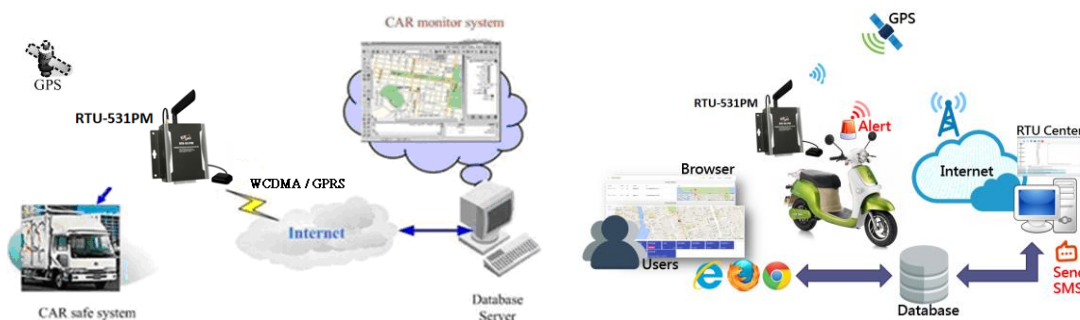
### I/O Interface

I/O	Channel number	Specification
DO	2	Output type : Open-Collector (NPN) Load Voltage: +30V Max. Load Current : 100mA Max
DI	4	Input type : Sink or Source, Isolated channel with common power or ground On Voltage : +3.5V~+30V Off Voltage : +1V Max
AI	4	Resolution : 16-bit Input Range/Type : 0~20mA Sample Rate : 1KHz Max

## Hardware Specifications

<b>System</b>		
CPU	32 bit, Microprocessor	
Micro SD interface	4GB max.	
<b>Serial Ports</b>		
COM ports	COM1: Tx,D,RxD,GND for configuration	
<b>2G System</b>		
Frequency Band	GSM : 850/900/1800/1900 MHz;	
GPRS connectivity	GPRS multi-slot : class 10/8 ; Mobile Station : Class B	
Coding Schemes	CS 1, CS 2, CS 3, CS 4	
<b>3G System</b>		
Frequency Band	WCDMA : 850/900/1900/2100 MHz	
Power class	Class 3(250mW @ WCDMA/HSPA)	
<b>GPS Interface</b>		
Support channel	56	
<b>General</b>		
Power Requirement	2W; Unregulated +10V DC ~ +30V DC.	
Power Consumption	Idle: 75 mA @ 24 V <sub>DC</sub> ; Data Link: 180 mA @ 24 V <sub>DC</sub> ; Peak: 460 mA @ 24 V <sub>DC</sub>	
LEDs	3 indicator LEDs	
<b>Environment</b>		
Operation Temp.	Operation : -25°C to 75°C; Storage Temp : -40°C to 80°C	
Humidity	5~95% non-condensing	
Dimensions	89mm x 124mm x 35mm (long*width* high)	
<b>LED</b>	<b>Description</b>	
EXT(red)	on	The power of the module is ON
	off	The power of the module is OFF
STA (Yellow)	Blinking (250 ms)	Network registered. GPS searching for satellite.
	Blinking (1 s)	Network registered. GPS is positioned.
	Blinking (50 ms)	Wrong PIN/PUN code.
	Always ON	Not registered.
3G(green)	Blanking pre 3 sec	3G modem normal(2G network)
	Twinkling twice per 3 sec	3G modem normal(3G network)
	OFF	3G modem fail

## Applications



## Ordering Informaion

**RTU-531PM CR**

Intelligent 3G Remote Terminal Unit with GPS (RoHS)