

## 4.2. Intelligent GPRS/GSM Modules



### GT-530

Intelligent SMS Alarm Controller

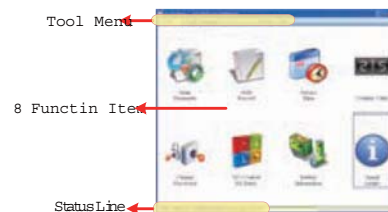
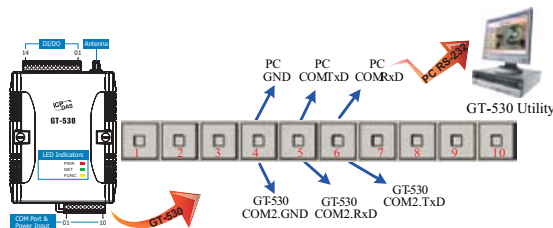
#### Features

- Support 900/1800/1900 MHz Tri-band frequency
- Identify ASCII or Unicode SMS Automatically
- Support max. 140 ASCII Characters
- Support max. 70 Unicode Characters
- Built-in ASCII Commands and SMS tunnel Communication Modes
- Max. 10 Default Phone Numbers
- Industrial Design with Surge Protection
- Support SMS setting and control
- 10 DI (6 Counter), 2 DO, 2 RS-232 port
- Digital input support NC/NO/Counter modes
- Send alarm SMS by DI trigger or exceed Counter preset limits
- Support simple command to send SMS via RS-232
- Support DC +10 V<sub>DC</sub> ~ +30 V<sub>DC</sub> Power Input
- Support 3.7 V Li-ion Battery Backup



#### Introduction

GT-530 is an intelligent SMS controller for industry applications with the simple commands and SMS tunnel function, and power can be input by external power or Li-ion Battery. It supports UNICODE or 7 bit format for users to send SMS messages with in various languages. Applying GT-530, the SMS report can be sent by defined time or DI/counter event trigger. This can be a remote control and alarm system allowing you to use your mobile phone to monitor and control your business from any location. Its alarm facilities provide a flexible way to distribute critical alarm information to any number of mobile phone users. GT-530 can monitor up to 10 digital inputs (6 counters). The user can also interrogate the status of I/O through SMS messages. The GT-530 also has 2 Digital output which can be activated via DI trigger or SMS to control the lamps, pumps, heaters etc.



#### I/O Specifications

Digital Input	
Input Channel	10 (6 DI can be set as counter + 4 DI work with Li-ion battery)
On Voltage Level	+3.5 V <sub>DC</sub> ~ +30 V <sub>DC</sub>
Off Voltage Level	+1V max.
Digital Output	
Output Channel	2
Output Type	Open Collector Output
Load Voltage	+24 V <sub>DC</sub> max.
Load Current	500 mA max.

#### LED Indicators

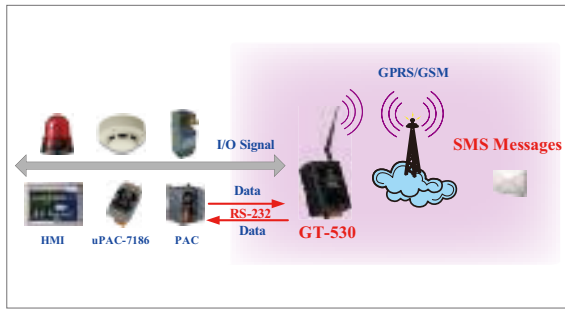
Digital Input			
EXT (red)	on	The external Power is active	
	off	The external Power is not active	
STA (orange)	EXT on	Normal	GSM Fail
		Always on or off	PIN code is wrong
EXT off	Off (sleep mode) blinking (1 sec)(wake up)	Always on	Blinking per 50 ms
	Off (sleep mode) blinking (1 sec)(wake up)	Always on	Blinking per 50 ms
GSM (green)	Blinking 3 sec	Modem normal	
	on	Modem fail (or Blinking(not 3 sec))	

#### System Specifications

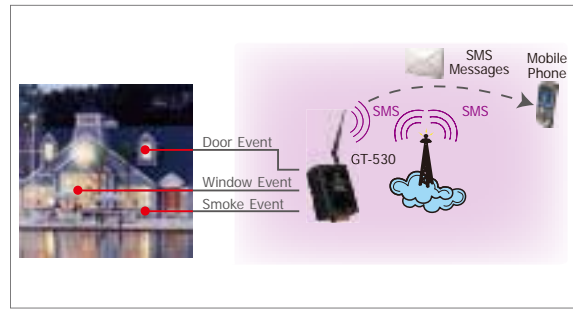
GSM/GPRS System	
GPRS/GSM Tri-band	900/1800/1900 MHz
GPRS Multi-slot	Class 10/8
GPRS Mobile Station	Class B
GPRS Class 10	Max. download speed 85.6 kbps
CSD	Up to 14.4 kbps
Compliant with GSM Phase 2/2+	Class 4 (2 W @ 900 MHz) Class 1 (1 W @ 1800/1900 MHz)
Coding Schemes	CS 1, CS 2, CS 3, CS 4
SMS	Text and PDU Mode
Serial Ports	
COM2	RS-232: TxD, RxD, GND
COM3	RS-232: TxD, RxD, GND
Power	
Protection	Reverse polarity protection
Frame Ground Protection	ESD, Surge, EFT, Hi-Pot
Required Supply Voltage	+10 V <sub>DC</sub> ~ +30 V <sub>DC</sub> with 600 mAh Li-ion battery backup (Option : 1200 mAh)
Mechanical	
Casing	Plastic
Flammability	UL 94V-0 material
Dimensions (W x H x D)	91 mm x 132 mm x 52 mm
Installation	DIN-Rail
Environment	
Operating Temperature	-25 °C ~ +55 °C
Storage Temperature	-40 °C ~ +80 °C
Humidity	5 ~ 95% RH, non-condensing

## Applications

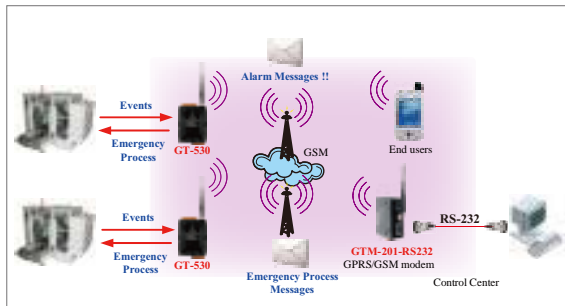
Signal Alarm and SMS communication



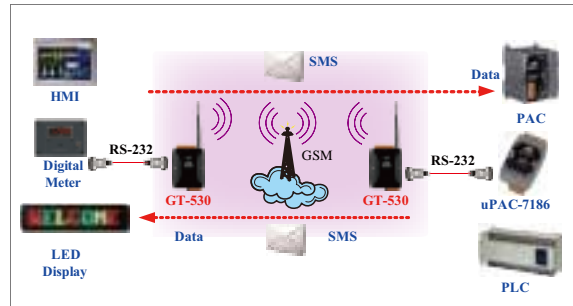
Home security



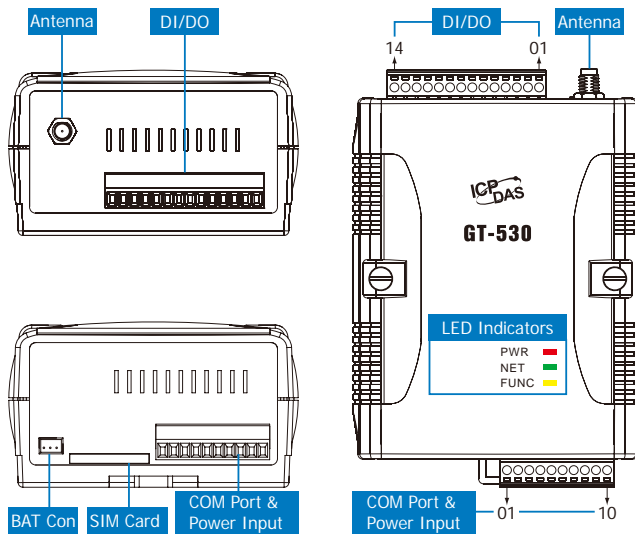
Remote maintenance



SMS Tunnel Communication

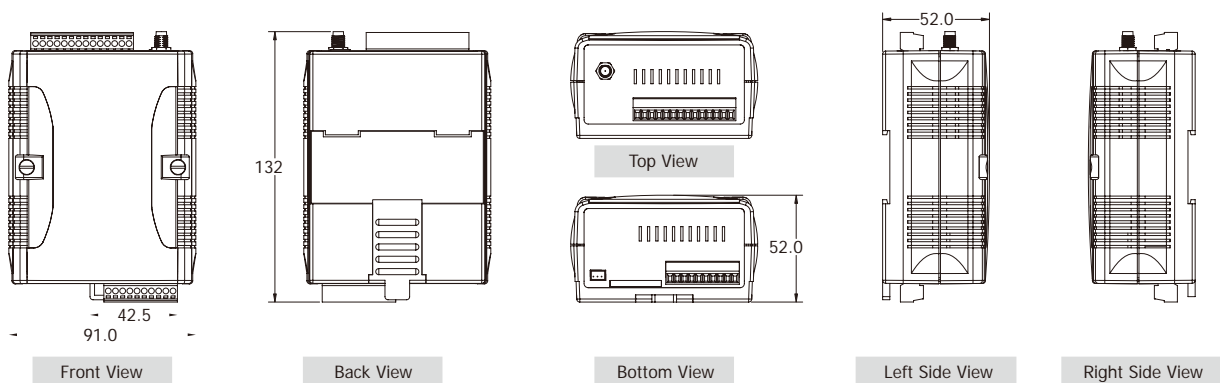


## Appearance



DI/DO		COM Port & Power Input	
Terminal No.	Pin Assignment	Terminal No.	Pin Assignment
DI	01 DI0	COM3 RS-232	01 GND
	02 DI1		02 Rx/D1
	03 DI2	COM2 RS-232	03 Tx/D1
	04 DI3		04 GND
	05 DI4		05 Rx/D2
	06 DI5	N/A	06 Tx/D2
	07 DI6		07 N/A
	08 DI7	Power Input: +10 V <sub>DC</sub> ~ +30 V <sub>DC</sub>	08 DC.+Vs
	09 DI8		09 DC.GND
	DO	10 DI9	Frame Ground
11 DO0			
DI/DO	12 DO1		
	13 DO.PWR		
	14 Ext.GND		

## Dimensions (Unit: mm)



### Bestellbezeichnung

Nr. 122358 GT-530-CR  
Intelligenter SMS Störmelder

### Zubehör

Nr. 122943 Antenne Mini Mag  
Für GSM Modem