

# GE864T-GPS

## GE864T-GPS

GSM/GPRS/GPS Terminal



### Description

GE864T-GPS GSM/GPRS/GPS terminal is the new generation based on the Quad-Band and RoHS compliant GE864 core engine incorporating additional and new features.

The GE864T-GPS featuring the embedded Python™ script interpreter provides the possibility for running customer programs inside the modem, thus making the terminal a complete self-contained application platform for customer solutions. Programmable I/O port, RS232 port and Serial Second GPS Port can be used for monitoring external signals, connecting sensors, and switching external devices. The GE864T-GPS offers jamming detection functionality allowing the unit to sense attempts to disrupt the GSM communication by interference with the GSM signal.

GE864T-GPS offers extended operating temperature, integrated TCP/IP stack, direct control by standard serial RS-232 interface and with a broad supply voltage range (5-32 VDC - Min1.2A), the GE864T-GPS terminal is a complete stand alone solution for m2m applications.

GE864T-GPS Terminal is integrating full 48-channels A-GPS functionality. It combines the high performance from Telit's proven GSM/GPRS core technology with the latest SiRFstarIV™ high sensitivity single-chip A-GPS receiver.

GE864T-GPS, supports Over-the-Air firmware update by means Premium FOTA Management. By embedding RedBend's vCurrent® agent, a proven and battle-tested technology powering hundreds of millions of cellular handsets world-wide is able to update its products by transmitting only a delta file, which represents the difference between one firmware version and another.

### Specifications - Mechanical

- Dimensions: 85 x 70 x 33 mm,
- Weight: 140 grams.

### Key Features

- Quad-band EGSM 850/900/1800/1900 MHz,
- Embedded Python Version 1.5.2 ,
- RS232 interface (DB9-Female),
- Analog Audio Support (2.5mm jack, Mono-Mic & Mono-Ear),

- 2 Digital Inputs, 2 Digital Outputs and 2 ADC Connections on GPIO socket.

### Product Features

- Supported bands
  - 4 Bands GSM / GPRS :  
850 / 900 / 1800 / 1900 MHz
- SIM Access Profile,
- Quad Band GPRS and EDGE class 33,
- Control via AT commands,
- Serial port multiplexer 3GPP TS27.010,
- SIM application Tool Kits 3GPP TS

- Built in UDP/TCP/FTP/SMTP stack,
- Extended temperature range:
  - 40°C to +85°C (Operational),
- Status and Power Leds,
- GPS Binary Serial Port (Also 3.0V Voltage Output),

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## Interfaces

- GPIO Socket (2 outputs, 2 inputs, 2 ADC)
- D-type 9 pin RS-232 connector,
- GPS Binary Serial Port (Also 3.0V Voltage Output),
- SMA female, 50 Ohm GSM RF connector,
- SMA female, 50 Ohm GPS RF connector,
- 2.5mm jack (Mono Mic, Mono Ear),
- Power Socket (PWR, GND, RST),
- On board SIM card holder(Push-Push Type),
- Optional WatchDog Timer with MCU (PIC12F675) controller.

## Circuit switched data transmission

- Asynchronous transparent circuit switched data (CSD) up to 14.4 Kbps
- Asynchronous non-transparent CSD up to 9.6 Kbps
- V.110

## GPRS data

- GPRS class 10
- Mobile station class B
- Coding scheme 1 to 4
- PBCCH support

## Fax

- Group 3, class 1

## SMS

- Point-to-point mobile originated and mobile terminated SMS,
- Concatenated SMS support,
- SMS cell broadcast,
- Text and PDU mode,
- SMS Over GPRS.

## GPS

- SirfStarIV Chipset,
- Integrated LNA,
- GPS current consumption:  
**Hibernate:**0.045mA, **Acquisition:**45mA,  
**Tracking:** 37mA
- Accuracy<2.5m,
- Support 48-Channel, GPS L1 1575.42MHz,
- **Hot Start**<1s, **Warm Start**<35s,  
**Cold Start**<35s,
- A-GPS function.

## Electrical

- Input Voltage Level —>  
- 9 –32VDC @ 1.2 A min
- Output power —>  
- Class 4 (2 W) @ 850/900 MHz  
- Class 1 (1 W@ 1800/1900 MHz
- Sensitivity —>  
- -107 dBm @ 850/900 MHz  
- -106 dBm @ 1800/1900 MHz

## Additional features

- SIM phonebook
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- IRA character set
- Jamming detection & report
- Embedded TCP/IP stack, including TCP, IP, UDP, SMTP and FTP protocols
- TFMS (Telit Firmware Management Services) Over-the-Air update
- Remote AT Commands
- Event Monitor

### Python\* application resources

- Python\* script interpreter (module takes the application code directly in the Python\* language)



- Memory: 1.9 MB of NV memory for the user scripts and 1.2 MB RAM for the Python\* engine usage

- Over-the-air application SW update
- IIC Bus and SPI Bus controlled in Python\*