

## **GSM** | **GPRS**









The Telit GT863-PY terminal is a complete encased modem solution for wireless m2m applications.

GT863-PY is the new generation of Telit terminals based on the quad-band and RoHS compliant GE863 core engine incorporating additional and new features.

The GT863-PY featuring the embedded Python<sup>™</sup> 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 ports and the IIC-Bus can be used for monitoring external signals, connecting sensors, and switching external devices. The GT863-PY is capable of communicating through all traditional data services provided by GSM/GPRS networks. As with all Telit modules, the GT863-PY offers jamming detection functionality allowing the unit to sense attempts to disrupt the GSM communication by interference with the GSM signal.

Directly controlled by a standard serial RS-232 interface and offering a broad supply voltage range (9–24 V DC), the GT863-PY is a universal solution for most low-volume m2m and mobile data applications.

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

As a part of Telit's corporate policy of environmental protection, all products comply to the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

#### **Product features**

- Quad-band EGSM 850 / 900 / 1800 / 1900 MHz
- Output power
  - Class 4 (2W) @ 850 / 900 MHz
  - Class 1 (1W) @ 1800 / 1900 MHz
- Control via AT commands according to GSM 07.05, 07.07 and Telit enhancements
- Supply voltage range: 9–24 V DC
- TCP/IP stack access via AT commands
- Power consumption (typical)
  - Idle (registered, power saving): < 12 mA
  - Dedicated mode: 110 mA
  - GPRS cl.10: < 550 mA

- Serial port multiplexer GSM 7.10
- SIM access profile
- Sensitivity:
  - -107 dBm (typ.) @ 850 / 900 MHz -106 dBm (typ.) @ 1800 / 1900 MHz
- Dimensions: 107 x 64 x 33 mm
- Weight: 135 grams
- Temperature range
- -30°C to +75°C (Operational) -40°C to +85°C (Storage temperature)

## Making machines talk."

# GT 863-PY







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Distributed by:

#### Interfaces

- 4 general purpose I/O or IIC Bus
- D-type 9 pin RS-232 connector
- Serial interface
- Baud rate from 300 to 115,200 bps
- Autobauding from 2,400 to 38,400 bps
  Short circuit (to ground) protection on all outputs
- ITU-T V.24 serial link
- SMA female, 50 Ohm RF connector
- RJ11 / 6 pin for GPIOs
- Power connector with 4 pin Input power = 9 -24 VDC @ 1.2 A min
- On board SIM card holder, 3V with real-time detection

#### Audio

- Telephony, emergency call
- Half rate, full rate, enhanced full rate and adaptive multi rate voice codecs (HR, FR, EFR)
- Superior echo cancellation & noise reduction
- DTMF

#### Approvals

- Fully type approved conforming with R&TTE directive
- CE

#### SMS

- Point-to-point mobile originated and mobile terminated SMS
- Concatenated SMS supported
- SMS cell broadcast
- Text and PDU mode

#### 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

#### **GSM** supplementary

- Call forwarding
- Call barring
- Call waiting
- Advice of charge
- Calling line identification presentation (CLIP)
- Calling line identification restriction (CLIR)
- Unstructured supplementary services mobile originated data (USSD)
- Closed user group

#### Additional features

- SIM phonebook
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- Buzzer management
- Status LED support
- 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

#### 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\*

📄 python

#### Telit's EASY features

 EASY SCAN<sup>®</sup> automatic scan over GSM frequencies (with or without SIM card)

#### Order-No.

Please contact your Telit representative for order codes and all further information

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