

Gsm Gprs Modem



# Compact & intelligent industrial modem

The 2S-865T terminal is a complete modem solution which combines the access to digital communication services in GSM and GPRS networks

2S-865T is the new generation based on the dual-band and RoHS compliant Telit GL865 core engine incorporating additional and new features.

The 2S-865T 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, RS232 port and Serial Debug Port can be used for monitoring external signals, connecting sensors, and switching devices. The 2S-865T offers jamming detection functionality allowing the unit to sense attempts to disrupt the GSM communication by interference with the GSM signal.

2S-865T offers extended operating temperature, integrated TCP/ IP stack, direct control by standard serial RS-232 interface and with a broad supply voltage range (9-35 VDC - Min1.2A), the 2S-865T terminal is a complete standalone solution for m2m applications.

2S-865T, 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.







# **Technical Specifications**



## Electrical

Input Voltage: 9–35VDC @ 1,2A min

#### Mechanical / Environmental

- Dimensions: 85 x 80 x 30 mm
- Weight: 152 grams
- Extended temperature range: -40°C to +85°C (Operational)



### Python application resources

Pvthon 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

#### **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



Group 3, class 1



Point-to-point mobile originated and mobile terminated SMS

- Concatenated SMS support
- SMS cell broadcast
- Text and PDU mode
- SMS Over GPRS

## Interfaces

- Power Socket (PWR, GND, RESET)
- D-type 9 pin RS-232 connector
- Auxiliary Debug Port (Also 3.0V Voltage Output)
- GPIO Socket (2 outputs, 2 inputs)
- SMA female, 50 Ohm RF connector
- On board SIM card holder (Push-Push Type)
- Network Status and Power LEDs

#### **GSM/GPRS** Features

- Dual-band EGSM 900 / 1800 MHz
- Built-in UDP/TCP/FTP/SMTP stack
- Control via AT commands
- Serial port multiplexer 3GPP TS27.010
- SIM Access Profile
- SIM application Tool Kits 3GPP TS
- RF output power Class 4 (2W) @ 900MHz Class 1 (1W @ 1800MHz)
- RF Sensitivity -108dBm @ 900MHz / -107dBm @ 1800MHz

#### GPRS Data gprs

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

### **Additional Features**

- SIM phonebook
- Fixed dialing number (FDN)
- Real-time clock
- Alarm management
- IRA character set
- Jamming detection & report
- TFMS (Telit Firmware Management)
- Services) Over-the-Air update
- Remote AT Commands
- Event Monitor