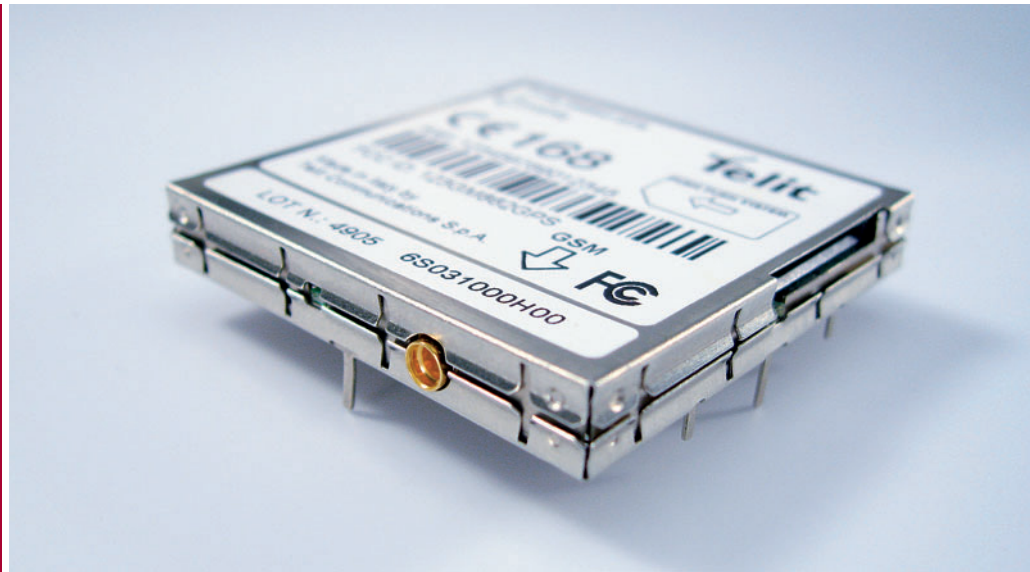
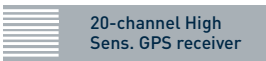


# GM862-GPS

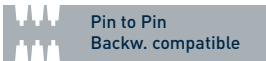
Modem



SiRF®  
Powered



20-channel High  
Sens. GPS receiver



Pin to Pin  
Backw. compatible



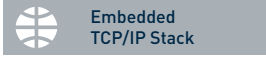
Quad Band



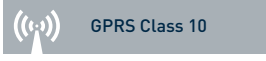
RoHS Compliant



On Board  
SIM Holder



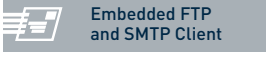
Embedded  
TCP/IP Stack



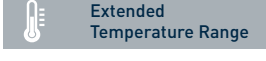
GPRS Class 10



PYTHON\*  
Script Interpreter



Embedded FTP  
and SMTP Client



Extended  
Temperature Range



Extended  
RF Sensitivity

The new GM862-GPS module is at the cutting edge of the Telit product line. It combines a Quad-Band GSM/GPRS modem, with a 20 channel high sensitivity SiRFstarIII™ Single Chip GPS receiver.

Based on the Pin-to-Pin compatibility of the GM862-GPS module to all previous versions, the functionality of existing and new applications can be extended by the latest state of the art GPS technology.

With its ruggedized design, extended temperature range, integrated SIM-Card reader and industrial connectors, the Telit GM862-GPS is the perfect platform for all telematics applications, Fleet Management-, Tracking- and Security-devices and more.

Additional features like Jamming Detection, integrated TCP/IP protocol stack, Easy Scan functionality and the direct support of an embedded camera offer extended functionality to the application at no additional cost.

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

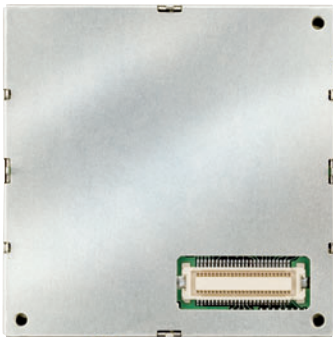
### Product Features

- 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 proprietary Telit
- Supply Voltage Range: 3,4–4,2 V DC  
(3,8 V DC recommended)
- GSM Power Consumption (typical values)
  - power off: < 26 uA
  - Idle (registered, power saving): < 4 mA
  - Dedicated mode: 170 mA
  - GPRS cl.10 (max): 500 m
- Serial Port Multiplexer GSM 7.10
- SIM Access Profile
- GPS Power Consumption:  
Stand-by current: 1 mA  
Operating current: 70 mA,  
including 20 mA for the antenna LNA
- Sensitivity:  
-107 dBm (typ.) @ 850 / 900 MHz  
-106 dBm (typ.) @ 1800 / 1900 MHz
- Dimensions: 43,9 x 43,9 x 6.9 mm
- Weight: 20 gr.
- Extended Temp. range: -30° / +80° C
- RoHS compliant
- TCP/IP stack access via AT commands

**Making machines talk.**

# GM862-GPS

Modem



original size



## GPS Receiver

- High sensitivity for indoor reception, up to -159 dBm
- Extremely fast TTFF's at low signal levels
- Hot starts < 2 seconds
- 200,000+ effective correlators
- Supports 20-Channel GPS
- GPS NMEA 0183 output format

## Interfaces

- 50-pin board to board Molex connector
- 13 I/O ports max.
- Analog Audio (balanced and unbalanced)
- 1 A/D converter, Buzzer output
- Camera direct support mode on I/O ports
- ITU-T V.24 Serial Link through UART: at CMOS level  
Baud rate from 300 to 115.200 bps  
Autobauding from 2.400 to 57.600 bps
- 50 Ohm MMCX Antenna connector
- On board SIM holder, 1.8V / 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, AMR)
- Superior Echo Cancellation & Noise Reduction
- Handset & Hands-free operations
- DTMF

## Approvals

- Fully type approved according to R&TTE
- CE, GCF, FCC, PTCRB, IC

## 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 & Call Hold
- 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 Dialling Number (FDN)
- Real Time Clock
- Alarm Management
- Battery Management
- Network LED support
- IRA character set
- Jamming Detection & Report
- Embedded TCP/IP stack, including TCP, IP, UDP, SMTP and FTP protocol

## Python\* application resources

- Python\* script interpreter (allows driving the module »internally« implementing the application code directly in the Python\* language)
- Memory: 3 MB of NV Memory for the user scripts and 1.5 MB RAM for the Python\* engine usage
- Over-the-Air Application SW update
- IIC Bus and SPI Bus controlled in Python\*



## Telit's EASY® features

- »EASY CAMERA« it provides the capability of a direct support of a VGA colour camera
- »EASY SCAN« automatic scan over GSM frequencies (also without SIM card)

## Order-No.

GM862-GPS 3 990 250 657

**Telit** wireless solutions

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