

Satellite

SL 868 GPS Standalone Embedded





Ultra Compact



LCC Package



High Sensitivity



NMEA 0183



< 2.5m Position



Low Power Consumption



WAAS, EGNOS, MSAS and GAGAN capable



48 Channel GPS Receiver



A-GPS



Ephemeris File Injection



RoHS Compliant



Extended Temperature Range The new Telit SL868 is a state-of-the-art 48-channel GPS module with high sensitivity, extremely low power consumption and extended ephemeris injection for fastest TTFF.

Telit SL868 coupled with a Telit GSM/GPRS module represents the ideal Wireless+GPS solution in terms of total cost effectiveness and time-to-market readiness.

The extreme low profile and small size of the LCC package enables the design of ultracompact applications. The solution cost and required space is significantly reduced.

With its ultra-compact design and extended temperature range, the Telit SL868 is the perfect module for low, medium and high-volume m2m combined applications and mobile/tracking data devices.

Telit SL868 is equipped with integrated LNA as well as a wide set of interfaces like UART, I2C, and SPI. It supports assisted ephemeris file injection as well as Satellite Based Augmentation System (SBAS) like WAAS, EGNOS, MSAS and GAGAN. Moreover, Telit SL868 is able to track and remove in-band Jammers.

SL868 is provided with an internal SW engine able to locally predict the ephemeris for three days in advance starting from ephemeris data collected by satellites.

SL868 is provided with internal Flash memory to store operative SW, SW updates and Extended Ephemeris files (locally and server generated).

Equipped with a powerful yet power saving baseband processor, Telit SL868 provides all the GPS information via NMEA standard protocol on serial interface.

Applications requiring an extremely quick FIX can efficiently retrieve the correct position within two seconds, by means of assisted GPS and real-time ephemeris file injection.

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

Product features

- Dimensions: 16 x 12.2 x 2.4 mm
- Weight: 1.8 g
- 24-pad LCC package, requiring only 2 Layer PCB
- Frequency Band: GPS L1 Band, C/A Code
- Standards: NMEA
- 48 Channel GPS architecture

- Sensitivity
 - Acquisition: -147 dBm
 - Navigation: -160 dBm
 - Tracking: -163 dBm
- Flexible power supply
 - Range from 2.85 up to 3.6 V
- Positional Accuracy (CEP50): Autonomous Positional Error < 2.5 m



SL 868 **GPS Standalone** Embedded













actual size



Telit Communications S.p.A. Via Stazione di Prosecco, 5/B I-34010 Sgonico (Trieste), Italy Tel +39 040 4192 200 Fax +39 040 4192 289 E-Mail: EMEA@telit.com

Telit Wireless Solutions Inc. 3131 RDU Center Drive, Suite 135 Morrisville, NC 27560, USA Tel +1 888 846 9773 or +1 919 439 7977 Fax +1 888 846 9774 or +1 919 840 0337 E-Mail: NORTHAMERICA@telit.com

Telit Wireless Solutions Inc. Rua Cunha Gago, 700 - cj 81, Pinheiros São Paulo - SP, 05421001, Brazil Tel +55 11 2679 4654 Fax +55 11 3031 5051 E-Mail: LATINAMERICA@telit.com

Telit Wireless Solutions Co., Ltd. 12th Fl., Shinyoung Securities Bld. 34-12, Yeouido-dong, Yeongdeungpo-gu Seoul, 150-884, Korea Tel. +82 2 368 4600 Fax +82 2 368 4606 E-Mail: APAC@telit.com

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Distributed by

Product features

- Accuracy
 - Speed: < 0.01 m/s - Heading: < 0.01 deg
- Time To First Fix (90% @ -130 dBm)
 - Hot Start: 1 s - Cold Start: <35 s
- Current consumption
 - Hibernate mode: 17 mA
 - Low power mode (Tracking 1Hz): 13 mA
 - Full power Tracking: 34 mA
- RoHS compliant
- Temperature Range
 - Operating temperature: -40 to +85°C
 - Storage temperature: -40 to +85°C

Interfaces

- UART, SPI, IIC interfaces
- PPS for precise timing
- EGONS, WAAS, GAGAN and MSAS capability embedded with correction of positional errors due to ionospheric and orbital disturbances
- RTC for efficient power management

Additional features

A-GPS: ephemeris file injection

Order No.

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























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