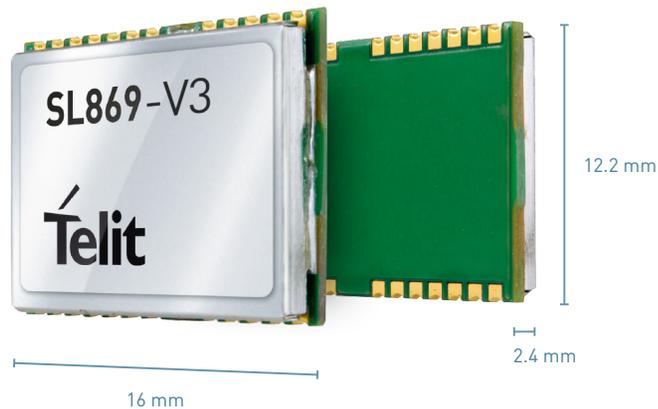


## JUPITER SL869-V3

GNSS Standalone

GNSS Embedded



### Product Description

The SL869-V3 has been designed without compromise to give the best pure GNSS tracking performances. The SL869-V3 is equipped with Teseo 3 core and is able to track GPS, Glonass, Beidou and Galileo constellations. Moreover, it supports A-GNSS onboard generation as well as A-GNSS server-generated file injection.

SL869-V3 is provided with multiple communication ports like UART, I2C. The I2C port is available to support external sensors.

The embedded flash memory allows FW upgrades and customization.

The embedded TCXO ensure stable top level performances over the whole temperature range.

The Jupiter SL869-V3 has been designed as a pure GNSS companion module of the SL869-3DR. The SL869-V3 is also pin-to-pin compatible with the SL869 and SL869-V2. While SL869-3DR is equipped with Dead Reckoning software and internal 6-axis MEMS sensor, the SL869-V3 is equipped with a pure GNSS navigation engine and does not have embedded MEMS in order to provide a low cost solution that enable customer to scale down the application keeping the same command interface of SL869-3DR.

The SL869-V3 is the best platform for high demanding applications like Automotive, Telematics, Metering.

### Key Features

- GPS, Glonass, Galileo and Beidou compatible
- 16 x 12.2 x 2.4 mm LLC package
- Supply voltage range: 3 - 3.6 VDC
- Assisted GPS
- 10Hz Navigation, SBAS, 1PPS
- UART, I2C

### Key Benefits

- Multi-constellation allows accurate navigation in harsh environments such as urban canyons
- AGPS support via Extended Ephemeris injection as well as Extended Ephemeris on-board generation for fastest TTFF
- Compatible with JN3 and popular 12 x 16 mm industry standard footprint

### Family Concept

The xL869 is Telit's GNSS Unified Form Factor family which allows customers to select among different GNSS technologies. Modules in this family are offered in a 16 x 12.2 mm, 24-pad, LCC package supporting GPS, GLONASS, Galileo, and QZSS constellations.

Our positioning product portfolio is the result of over twenty years of experience in GNSS applications. Telit has developed a range of products compatible with the well-known GPS constellation as well as its Russian counterpart GLONASS. Moreover, our portfolio is fully aligned with the upcoming service launch of Europe's Galileo constellation. Valuable features such as Dead Reckoning, Precision Timing, as well as speed and reliability assured by multi-constellation coverage, provide additional benefits for your application.

Your application development effort can also benefit significantly from the seamless integration between Telit's cellular and positioning modules. This bundling of cellular and positioning modules significantly reduces development complexity without adding costs. Multi-constellation positioning products applied together with our eCall / ERA-GLONASS compliant cellular modules bring you ready-to-use emergency automotive tracking solutions for the European and Russian markets.

Typical applications include fleet management systems, European GPS-assisted road tolling systems, cellular base stations, in-car navigation systems, automotive telematics-systems, and GPS-based personal sports training monitors.

Combine your Cellular module with

Short Range modules



GNSS modules



[www.telit.com](http://www.telit.com)



# JUPITER SL869-V3

GNSS Standalone

## Product Features

- Frequency Band: GPS (L1), GLONASS (L1, FDMA), Galileo (E1), Beidou (B1)
- Standards: NMEA, RTCM 104
- 48 Channel GNSS architecture
- Positional Accuracy (CEP50): 1.5 m
- Time To First Fix (@ -130 dBm)
  - Hot Start: 1 s
  - Cold Start: < 34 s
- A-GPS: local ephemeris prediction
- A-GPS: server predicted ephemeris
- Jammer rejection

## Electrical & Sensitivity

- Current consumption
  - Acquisition: 171 mW
  - Tracking: 147 mW
  - Stand-by: 251 uW
- Power supply
  - VCC: 3.0 - 3.6 V
  - Battery: 2.5 - 3.6 V
- Sensitivity
  - Acquisition: -146 dBm
  - Navigation: -158 dBm
  - Tracking: -162 dBm

## Environmental

- Dimensions: 16 x 12.2 x 2.4 mm
- Weight: 1.8 g
- 24-pad LCC package
- Temperature Range
  - Operating temperature: -40 to +85°C
  - Storage temperature: -40 to +85°C

## Interfaces

- 3 UARTs
- 1PPS
- EGNOS, WAAS and MSAS
- I2C

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For a quicker and more rewarding integration experience join the Telit Technical Forum. There you can browse the first open forum covering all IoT topics, get direct support by region (EMEA, North America, Latin America, APAC), take part in this quickly growing IoT community and exchange experiences.

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