

PRODUCT DATASHEET



GNSS GPS L86-M33 Breakout

333201

The GNSS GPS L86-M33 Breakout offers precise location tracking with GPS, GLONASS, and Galileo support, ideal for various projects.

Full product documentation, files and tutorials: solde.red/333201

CORE ATTRIBUTES

SKU 333201

WEIGHT 18 g

BARCODE 732388662708

DESCRIPTION

Global Navigation Satellite Systems (GNSS), or as we all like to call it "GPS," enable precise location determination on Earth. Thanks to this module, you can use GNSS for your project and employ the device for asset tracking or create a wearable device. The module is small, energy-efficient, highly effective, and easy to use thanks to its built-in antenna.

L86-M33 is a GNSS receiver, meaning it can receive signals from **GPS, GLONASS, and Galileo** constellations. Equipped with **EASY** (Embedded Assist System for self-generated orbit prediction) and **AlwaysLocate** technologies, the L86-M33 ensures fast and accurate positioning even in challenging environments. Its advanced internal logger, **LOCUS**, allows you to store your routes and location data.

In addition to the aforementioned L86-M33 module, which has an integrated antenna, our breakout board also has a connector for a **CR1220 battery** that is used as a backup for timekeeping and GPS data. The module can operate without a battery, but each time it will have to pull data from the satellites anew (cold start). If the integrated antenna is not sufficient, there is an IPX connector on the board for adding an external, stronger antenna. To easily access the pins of the module, the pins are exposed on the board for easy access.

TECHNICAL DETAILS

- **GNSS:** GPS+GLONASS+Galileo
- Onboard ceramic antenna
- Option to connect external IPX antenna
- CR1220 battery for time retention (battery not included)
- **IC:** L86-M33
- **Voltage:** 3V3
- **Max. update rate:** 10Hz
- **Dimensions:** 54mm x 38mm / 2.1 × 1.5 inch

SPECIFICATIONS

INTERFACE	Uart
QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	Yes
MEASUREMENT TYPES	Position
IC PART NUMBER	L86-M33
LOGIC LEVEL	3V3 Or 5V

LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-GNSS-L86-M33-Arduino-Library
Open Source Hardware Files	https://github.com/SolderedElectronics/GNSS-GPS-L86-M33-breakout-hardware-design
Full Documentation	https://docs.soldered.com/gnss-gps/overview/
Arduino: Get Started	https://docs.soldered.com/gnss-gps/arduino/getting-started/
Hardware Details	https://docs.soldered.com/gnss-gps/hardware/
Arduino Library Documentation	https://docs.soldered.com/gnss-gps/arduino/init-and-readings/
Pinout	https://docs.soldered.com/assets/images/gnss-gps-native-pinout-e10b6a097fd060d5d1675eca3150426b.png

GALLERY

