

# ZED-F9

## SMART



65 x 65 x 30 mm

### Product Description

The ZED-F9 SMART evaluation board allows efficient evaluation of the u-blox F9 high precision positioning module.

The ZED-F9 module provides multi-band GNSS positioning and comes with built-in RTK technology providing centimetre level accuracy to users. The built-in USB interface provides both power supply and high-speed data transfer and eliminates the need for an external power supply.

### Features

- Mini-USB for an easy connection to a PC
- 20-pin connector to provide power (5 V-12 V DC), GPIO, 3.3V TTL,
- Three LED's to indicate GNSS operation
- SMA Connector for external active antenna, u-blox ANN-MB is the recommended antenna, Protocols: NMEA, UBX, RTCM

### Highlights

- Powered by u-blox F9 high precision GNSS module
- Extensive visualisation & evaluation features
- Supports NTRIP server/client RTCM correction stream & AssistNow Services
- All ports accessible outside
- USB (v2.0 compatible) available for power supply and Data Transfer
- Easy to use

### System Requirements

- PC with USB Interface
- Operating System: Windows 10 / Windows 8 (Intel Version Platform) / Windows 7
- USB Drivers are provided with the ZED-F9 SMART Board

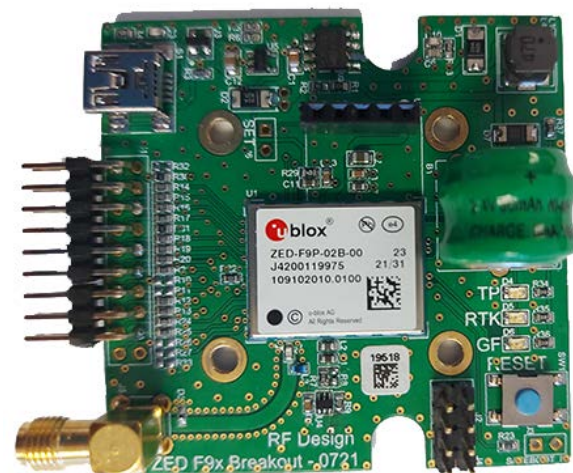
### u-center GPS/GNSS evaluation software

ZED-F9 Installer includes u-center, which is an interactive tool for configuration, testing, visualization and data analysis of positioning chips and modules. u-center provides useful assistance during all phases of a system integration project.

Web Link ZED-F9P : <https://www.u-blox.com/en/product/zed-f9p-module>

Product Summary : [https://www.u-blox.com/sites/default/files/ZED-F9P\\_ProductSummary\\_UBX-17005151.pdf](https://www.u-blox.com/sites/default/files/ZED-F9P_ProductSummary_UBX-17005151.pdf)

Data Sheet : [https://www.u-blox.com/sites/default/files/ZED-F9P-04B\\_DataSheet\\_UBX-21044850.pdf](https://www.u-blox.com/sites/default/files/ZED-F9P-04B_DataSheet_UBX-21044850.pdf)



ZED-F9P SMART

ZED-F9H SMART

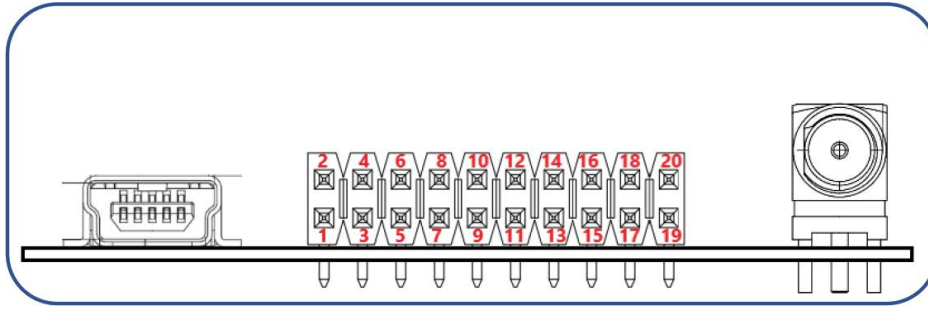
ZED-F9T SMART

ZED-F9K SMART

ZED-F9R SMART

### Product Variants

PINOUT



PIN	ZED-F9P / F9H	ZED-F9T	ZED-F9K / F9R
1	Vin (12V)	Vin (12V)	Vin (12V)
2	GND	GND	GND
3	TXD/SPI_MISO	TXD/SPI_MISO	TXD/SPI_MISO
4	GND	GND	GND
5	RXD/SPI_MOSI	RXD/SPI_MOSI	RXD/SPI_MOSI
6	SDA/SPI_CS_n	SDA/SPI_CS_n	SDA/SPI_CS_n
7	SCL/SPI_CLK	SCL/SPI_CLK	SCL/SPI_CLK
8	GND	GND	GND
9	TXRDY	TXRDY	TXRDY
10	D_SEL	D_SEL	D_SEL
11	TXD2(RTCM)	TXD2(RTCM)	TXD2(RTCM)
12	RXD2(RTCM)	RXD2(RTCM)	RXD2(RTCM)
13	RESET_N	RESET_N	WT
14	GND	GND	DIR
15	RTK_STAT	RTK_STAT	RTK_STAT
16	GEO_STAT	GEO_STAT	GEO_STAT
17	EXTINT	EXTINT	EXTINT
18	TP	TP	TP
19	N/C	EXT2	RESET_N
20	N/C	TP2	GND

Recommended Antenna for the ZED-F9P: ANN-MB

