

REBOTNIX[®]
INDUSTRIAL A.I. SOLUTIONS

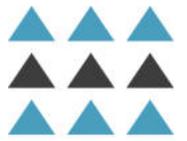
ADDON - WLAN/GPS

DOCUMENT VERSION 1.0.2



ABOUT ADDON - WLAN/GPS (USB)

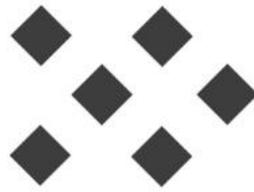
SKU: RB_AOWGU



The WLAN/GPS Add-On by REBOTNIX combines high-precision RTK GPS with reliable Wi-Fi 6 connectivity in one compact module – delivering centimeter-accurate real-time positioning and stable wireless data transmission simultaneously.

The RTK GPS module supports GPS, GLONASS, Galileo, BeiDou, and QZSS, while the integrated Wi-Fi 6 module provides fast connectivity at up to 2.4 Gbps via 2x2 MU-MIMO on both 2.4 GHz and 5 GHz bands.

A secondary diversity antenna further improves wireless performance. The rugged black anodized aluminum housing is designed for demanding conditions while maintaining a clean, professional appearance. Energy-efficient, scalable, and ready for a wide range of applications.



SPEZIFIKATIONS

ELEKTRICAL SPECIFICATIONS

Input Voltage	5V DC via USB-C
Power Consumption	300 - 700mA

ENVIRONMENTAL SPECIFICATIONS:

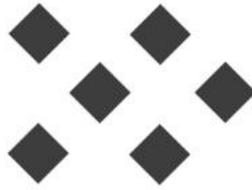
Operating Temperature	-20°C to 70°C
Humidity	Non-condensing

INTERFACES & CONNECTORS

USB	1 x USB 2.0 Type-C
ANT1	SMA connector
ANT2	SMA connector
ANT3	SMA connector

WIRELESS COMMUNICATION – WLAN

WLAN	IEEE 802.11ax (Wi-Fi 6), 2,4/5 GHz, 2x2 MU-MIMO
Data Rate	Up to 2,4 Gbps



POSITIONING – RTK GNSS

GNSS	GPS, GLONASS, Galileo, BeiDou, QZSS
Navigation Update Rate	Up to 30 Hz
Position Accuracy	RTK < 0.01 m

SUPPORTED GNSS MODULES

MODULE COMPARISON - ZED-F9P / ZED-F9R / ZED-X20P

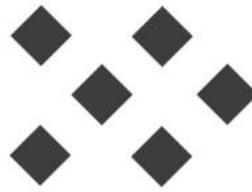
Feature	ZED-F9P	ZED-F9R	ZED-X20P
Main Function	High Precision RTK GNSS	High Precision RTK + Dead Reckoning	All-Band High Precision RTK
Constellations	GPS, GLONASS, Galileo, BeiDou, QZSS, NavIC	GPS, GLONASS, Galileo, BeiDou, QZSS	GPS, GLONASS, Galileo, BeiDou, QZSS, NavIC
IMU/Sensor Fusion	No	Yes (integrated IMU)	No
RTK Accuracy	0.01m + 1ppm CEP	0.01m + 1ppm CEP	0.01m + 1ppm CEP
Update Rate (RTK)	Up to 20 Hz	Up to 4 Hz (30 Hz IMU-only)	Up to 25 Hz
Key Advantage	Standard RTK positioning	Positioning without GPS signal	All GNSS bands supported

MODULE SHORT DESCRIPTION

ZED-F9P - High-precision multi-band GNSS with RTK, centimeter-level accuracy

ZED-F9R - ZED-F9P with integrated IMU for dead-reckoning during GNSS outages

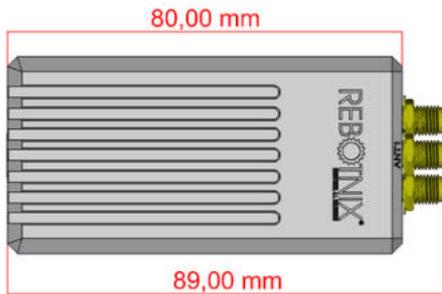
ZED-X20P - Next-generation multi-band GNSS supporting all major GNSS frequencies



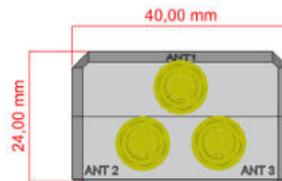
TECHNICAL SPECIFICATIONS

Dimensions	80 x 40 x 24mm (without Anntenas)
Weight	120g
Housing	Black anodized aluminum

FRONTSIDE



TOPSIDE

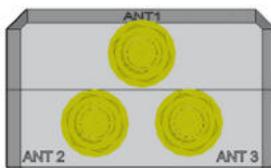


BOTTOMSIDE

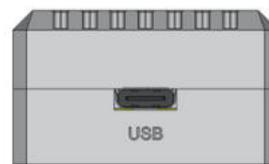


CONNECTIVITY

TOPSIDE



BOTTOMSIDE



PORT CONFIGURATION

Feature	ZED-F9P	ZED-F9R	ZED-X20P
Ant 1 (SMA Socket)	RTK GNSS Antena	RTK GNSS Antena	RTK GNSS Antena
Ant 2 (SMA Socket)	WLAN Primery Antena	TimePulse Input (Odometer)	WLAN Primery Antena
Ant 3 (SMA Socket)	WLAN Secundery Antena	WLAN Primery Antena	WLAN Secundery Antena
USB	USB Type-C socket used for power supply (5 V DC) and data transfer.		