REBOTNIX®
INDUSTRIAL A.I. SOLUTIONS
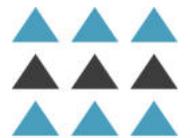
ABOUT ADDON - LTE/GPS (M8)

SKU: RB_AOLG8

The LTE/GPS Add-On by REBOTNIX combines high-precision RTK GPS with powerful LTE cellular connectivity in a single compact module – delivering centimeter-accurate real-time positioning and reliable wide-area data transmission, even in remote and challenging environments.

The RTK GPS module supports GPS, GLONASS, Galileo, BeiDou, and QZSS with update rates up to 30 Hz, while the integrated LTE module ensures stable connectivity via mobile networks independent of local infrastructure.

A dedicated diversity/MIMO antenna further improves cellular performance. The rugged black anodized aluminum housing combines modern design with exceptional robustness. Fully CE and FCC certified for international compliance

nVIDIA | Preferred Partner
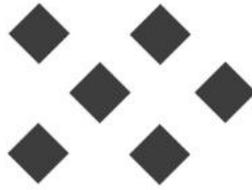
SPEZIFICATIONS

ELEKTRICAL SPECIFICATIONS

Input Voltage	5V DC via M8 Socket
Power Consumption	500 – 1000 mA, peak up to 1,5 A

ENVIRONMENTAL SPECIFICATIONS:

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

INTERFACES & CONNECTORS

M8 (M8 Version)	M8-Socket (4-Pin)
ANT1	SMA connector
ANT2	RP-SMA connector
ANT3	RP-SMA connector

WIRELESS COMMUNICATION – LTE

LTE Frequency Bands	850 MHz, 900 MHz, 1.8 GHz, 1.9 GHz
Data Rate	4G LTE up to 150 Mbit/s
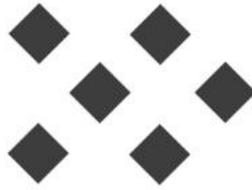
POSITIONING – RTK GNSS

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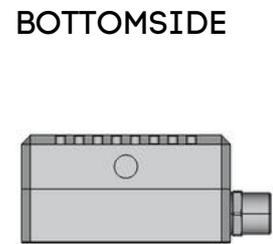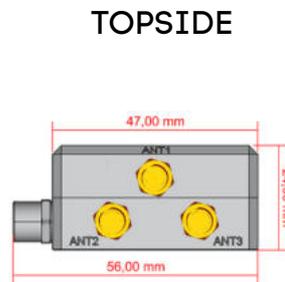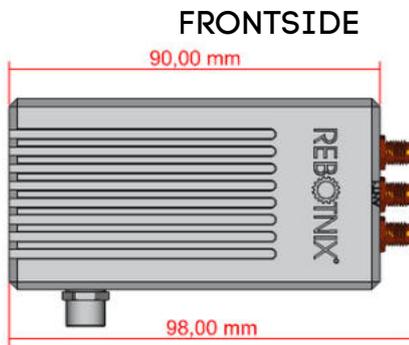
ZED-F9R - ZED-F9P with integrated IMU for dead-reckoning during GNSS outages

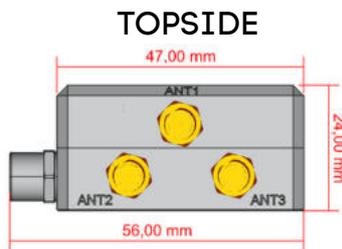ZED-X20P - Next-generation multi-band GNSS supporting all major GNSS frequencies

www.rebotnix.com
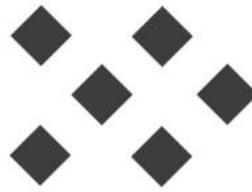
TECHNICAL SPECIFICATIONS

Dimensions	90 x 47 x 24mm (without Anntenas)
Weight	150g
Housing	Black anodized aluminum

FRONTSIDE

TOPSIDE

BOTTOMSIDE

CONNECTIVITY

TOPSIDE

RIGHTSIDE

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	M8 socket used for power supply (5 V DC) and data transfer.		

PIN 1	PIN 2	PIN 3	GND
+ 5V	USB_D_N	GND	USB_D_P

Solder View   Front View

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