

## RTK-GNSS With 6-axis IMU board [New]

The RTK-GNSS with 6-axis IMU board is designed to expand the RTK-GNSS and 6-axis IMU capabilities of AVerMedia's D135 / D317 / D331 products.

Utilizing the U-blox ZED F9 series, it brings high-precision GNSS technology with RTK functionality to the AVerMedia products.

This board includes a 6-axis IMU (Inertial Measurement Unit), which provides a 3-axis accelerometer and a 3-axis gyroscope for motion tracking and gesture detection applications.



Model	RTK-GNSS With 6-axis IMU board
Applicable product	D135 / D317 / D331
Connector type	mPCIe or USB wafer
RTK-System GNSS receiver (moving base) & Heading GNSS receiver (rover)	U-blox ZED-F9P + U-blox ZED-F9H
inertial measurement unit	6-axis IMU , 3-axis accelerometer and 3-axis gyroscope
GNSS	BeiDou, Galileo, GLONASS, GPS / QZSS
GNSS bands	B1I, B2I, E1B/C, E5b, L1C/A, L1OF, L2C, L2OF
External I/O	<ul style="list-style-type: none"> <li>- 1 x MHF for RTK-GNSS active Antenna</li> <li>- 1 x MHF for Heading-GNSS active Antenna</li> </ul>
Internal I/O	<ul style="list-style-type: none"> <li>- 1 x 4pin wafer for GNSS (5V power input &amp; USB 2.0)</li> <li>- 1 x 4pin wafer for IMU (3.3V Power input &amp; I2C)</li> <li>- 1 x 2pin wafer for RTK-GNSS PPS output</li> <li>- 1 x 2pin wafer for Battery input</li> <li>- Reserved 1 x 5 pin header for RTK-GNSS control (I2C/UART/SPI mode)</li> </ul>
Expansion	10pin wafer for Dual-RTK Heading-GNSS module expansion
Indication	<ul style="list-style-type: none"> <li>- 2x LED for RTK-GNSS Status indication</li> <li>- 2x LED for Heading-GNSS Status indication</li> <li>- Indicates the current geofence status and RTK positioning status</li> </ul>
Power Input	<ul style="list-style-type: none"> <li>- 3.3V +/- 5% (supplied by the Mini PCIe socket)</li> <li>- Reserved 5V +/- 5% (4pin GNSS wafer)</li> <li>- Reserved 3.3V +/- 5% (4pin IMU wafer)</li> </ul>
Environment	<ul style="list-style-type: none"> <li>- Operating temperature -40°C ~ 85°C</li> <li>- Storage temperature -40°C ~ 85°C</li> </ul>
PCB/Electronics Mechanical Info	- U-blox ZED-F9P+F9H: 30 x 50.8 x 13.7mm

\* All specifications are subject to change without prior notice.

