

## UM982 Dual Channel RTK InCase PIN GNSS receiver board

## Reference: ELT0210

## **Features:**

- Two antenna inputs with IPEX or SMA connectors
- On board low noise 3.3V voltage regulator
- USB, SPI, I2C and two UART (Tx, Rx) interfaces
- Time pulse LED, GEO LED, RTK LED, Power LED
- u-precise Unicore evaluation software
- Extensive visualization and evaluation features
- Time pulse LED, GEO LED, RTK LED, Power LED
- Backup supercapacitor
- Dimensions: 24x38 mm without SMA
- · Weight 10 gram

Data update rate

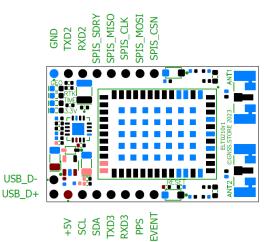
• Fully assembled and ready to use





GNSS FEATURES		
Receiver type	1408-channel NebulasIV engine Beidou,	
	Galileo, GLONASS, GPS/QZSS	
GNSS platform	All-constellation Concurrent GNSS	
GNSS bands	L1C/A/L2P (Y)/L2C/L5, B1I/B2I/B3I, G1/G2,	
	E1/E5a/E5b, L1/L2/L5	
GNSS technology	Dual RTK	
PERFORMANCE		
Horizontal pos. accuracy		
Single point (RMS)	1.5 m	
DGPS (RMS)	0.4 m + 1 ppm	
RTK (RMS)	0.008 m + 1 ppm	
( - /		
Vertical pos. accuracy		
Single point (RMS)	2.5 m	
DGPS (RMS)	0.8 m + 1 ppm	
RTK (RMS)	0.015 m + 1 ppm	
. ,		
Heading accuracy (RMS)	0.1°/1 m baseline	
Velocity accuracy (RMS)	0.03 m/s	
Time accuracy (RMS)	< 20 ns	
Observation accuracy (RMS	3)	
Pseudorange (all systems)	10cm	
Carrier Phase (all systems)	1 mm	
RTK Initialization time	< 5 s (typ)	
RTK initialization reliability	> 99.9%	
Time to First Fix	Cold start < 30s	

Dual antenna 20Hz



OTHER FEATURES	3
Heading	Angle from the True North to the baseline between Master and Slave antennas Angle from True North to the baseline of the base to rover in RTK mode.
Anti-spoofing	Advanced anti-spoofing algorithms
Anti-jamming	Active CW detection and removal Jamming status for each frequency
Operating temperature	0 °C to +50 °C
Supply voltage	4.5 V to 5.5 V
Supply current	<200 mA typ (without external antenna)
External antenna requirements	Supply voltage <5.0 V Consumption current <100 mA