Reference: ELT0224

Features:

- Antenna input with IPEX or SMA connector
- USB, 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
- Dimensions: 24.5x33.5 mm without SMA
- · Weight 10 gram
- · Fully assembled and ready to use





3.3-3.6V 200mA max VCC Data out VCC level TXD2 2 Data in VCC level RXD2 3 N/C 4 Leave open for always ON RESET 5 5V to enable USB V_USB 6 USB_D+7 USB D-8

I2C Clock VCC level SCL 9 Must connect to GND GND 10

20 N/C **EVÉNT** 19 **EVENT input VCC level** 18 RTK_STAT RTK_STAT output VCC level 17 SDA I2C Data VCC level RXD3 Data in VCC level 16 15 N/C 14 V BCKP Backup power supply 13 PPS Timepulse output VCC level TXD3 Data out VCC level 12 11 **GND** Must connect to GND

V_BCKP 2.0...VCC level, <60uA. Connect to VCC if not used, do not leave floating.

GNSS FEATURES	
Receiver type	1408-channel NebulasIV engine Beidou, Galileo, GLONASS, GPS/QZSS
GNSS platform	All-constellation Concurrent GNSS
GNSS bands	GPS L1C/A/L2P (Y)/L2C/L5 BDS B1I/B2I/B3I/B1C/B2a/B2b GLONASS G1/G2/G3 Galileo E1/E5a/E5b/E6 QZSS L1C/A/L!C/L2C/L5 NavIC L5 SBAS L1C/A

PERF	

Horizontal pos. accuracy Single point (RMS) 0.4 m + 1 ppm DGPS (RMS) RTK (RMS) 0.008 m + 1 ppm

Vertical pos. accuracy

Single point (RMS) 2.5 m DGPS (RMS)

0.8 m + 1 ppmRTK (RMS) 0.015 m + 1 ppmHeading accuracy (RMS) 0.1°/1 m baseline Velocity accuracy (RMS) 0.03 m/sTime accuracy (RMS) < 20 ns

Observation accuracy (RMS)

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 < 30 s Warm start < 20 s

Data update rate 50 Hz Positioning

	OTHER FEATURES	
	Anti-jamming	60dB narrowband anti-jamming technology Active CW detection and removal Jamming status for each frequency
	Anti-spoofing	Advanced anti-spoofing algorithms
	RTK technology	Instantaneous RTK initialization
	Operating	0 °C to +50 °C
	temperature	
	Supply voltage	3.3 V to 3.6 V
	Supply current	<150 mA typ (without external antenna)
	External antenna	Supply voltage <3.0 V
	requirements	Consumption current <100 mA