

Features:

- Fanless setup, passive cooling
- Build-in RF splitter for direct connection in multi-receiver setup
- Raspberry-PI RPI4-MODBP-2GB
- BCM2711 SOC, ARM Cortex-A72@1.5GHz
- WiFi 2.4 and 5GHz 802.11 b/g/n/ac, Bluetooth 5.0 BLE
- ELT_RtkBase full-featured software
- ELT_RTKBase User Guide
- microSD card 32GB with pre-installed software and documentation
- GNSS antenna input with SMA connector
- USB C port with OTG option
- Gigabit Ethernet port with optional PoE support
- Time pulse LED, Ethernet LED
- Backup supercapacitor
- Dimensions 110x95x30 mm
- Weight: 245/265 gr.
- Fully assembled and ready to use

Reference: ELT0731



MODULE FEATURES

Supports all-constellation multi-frequency on-chip RTK positioning and dual-antenna heading solution

Supports GPS L1/L2, BDS B1/B2/B3, GLONASS G1/G2, Galileo E1/E5b and QZSS L1/L2

All-system multi-frequency RTK engine and advanced RTK technology

AIM+: Industry leading Anti-jamming, Anti-spoofing Interference Monitoring and Mitigation

IONO+: Advanced protection against ionospheric disturbances to GNSS signals

APME+: a posteriori multipath estimator for code and phase multipath mitigation

LOCK+: superior tracking robustness under heavy mechanical shocks or vibration

RAIM+: Advanced Receiver Autonomous Integrity Monitoring

PERFORMANCE

Frequency:	GPS L1C/A, L1PY, L2C, L2P, L5 BDS B1I, B1C, B2a, B2b, B2I, B3 GLONASS L1CA, L2CA, L2P, L3 CDMA Galileo E1, E5a, E5b, E5 AltBoc, E6 QZSS L1C/A, L1C/B, L2C, L5 Navic L5 SBAS: Egnos, WAAS, GAGAN, MSAS, SDCM (L1,L5) On-module L-band
Single point positioning (RMS):	Horizontal: 1.2 m Vertical: 1.9 m Time Precision(xPPS out) - 5 ns Data Update Rate: 100 Hz
DGPS (RMS):	Horizontal: 0.4 m Vertical: 0.7 m Cold start < 45 s Initialization Time < 7 s (typical) Data Update Rate: 100 Hz
RTK (RMS):	Horizontal: 0.6 cm + 0.5 ppm Vertical: 1cm + 1 ppm Data Update Rate: 100 Hz Differential Data - RTCM V2.x, V3.X (MSM included), CMR v2.0/CMR+ (input only) Data Format - NMEA-0183, v2.3, v3.03, v4.0, RINEX v2.x, v3.x, Septentrio Binary Format (SBF)

OTHER FEATURES

Physical Characteristics:	Packaging: 239 pin LGA Dimension: 31.0 × 31.0 × 4.2 mm Weight: 6.8g
Environmental Specifications:	Working temperature: -40 °C ~ +85 °C Storage temperature: -55 °C ~ +85 °C Humidity: 95% No condensation Vibration: MIL-STD-810G
Communication Interfaces:	4 × UART (3 with hardware flow control) 1 × USB (2.0, HS) 1 × Ethernet (RMII/MDIO), 10/100 Mbps 1 × SD memory card 2 × Event inputs 2 × GPIO 1 × PPS out