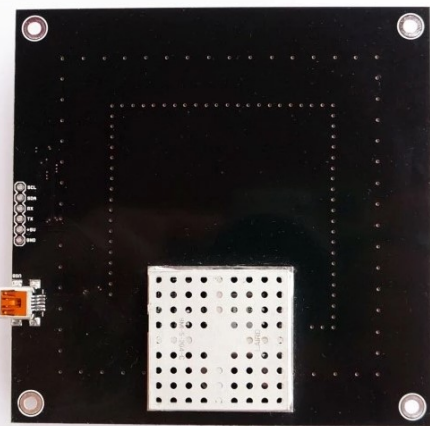
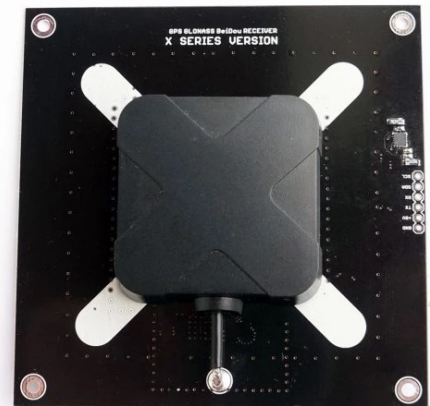


Features:

- On-board low noise 3.3V voltage regulator and RF filter for noise blocking
- **USB, UART** (Tx, Rx) interfaces and **I2C** (SDA, SCL)(for LIS3MDL)
- **LIS3MDL** I2C magnetometer (compass)
- **Triple band** GPS, GLONASS, BeiDou antenna
- **High Gain LNA** with very low noise figure
- **Double Band Pass filter** for noise rejection
- **Mini USB** connector
- EMI and RFI protection
- Time pulse LED
- u-center GPS evaluation software
- Extensive visualization and evaluation features
- Backup supercapacitor
- Dimensions: **100x100 mm**; hole distance **90x90 mm**
- Weight: **79 gr.**

Reference: ELT0062



GNSS FEATURES

Receiver type	72-channel u-blox M8 engine GPS/QZSS L1 C/A, GLONASS L10F, Beidou B1I, Galileo E1B/C, SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN
GNSS platform	Concurrent GNSS
GNSS bands	L1C/A, L10F, E1-B/C, B1I
Oscillators	TCXO

PERFORMANCE

Time pulse accuracy	≤ 20 ns (clear sky) ≤ 500 ns (indoor)
Time pulse frequency	0.25 Hz ... 10 MHz
Horizontal position accuracy (GPS+GLONASS)	2.5 m (autonomous) 2.0 m (with SBAS)
Acquisition	Cold start Hot start Aided start Nav.update rate
GPS+GLONASS	25 s 1 s 2 s 4 Hz
GPS	29 s 1 s 2 s 10 Hz
GLONASS	30 s 1 s 2 s 10 Hz
Beidou	34 s 1 s 3 s 10 Hz
Galileo	45 s 1 s 7 s 10 Hz
Velocity accuracy	0.05 m/s
Dynamic heading accuracy	0.3 deg
Sensitivity (GPS+GLO):	
Tracking and Navigation	-167 dBm
Reacquisition	-160 dBm
Cold start	-148 dBm
Hot start	-160 dBm

OTHER FEATURES

Anti-jamming	Additional SAW filter and LNA
Anti-spoofing	Spoofing detection
Memory	Flash
Operating temperature	0 °C to +50 °C
Supply voltage	4.5 V to 5.5 V
Supply current	<45 mA