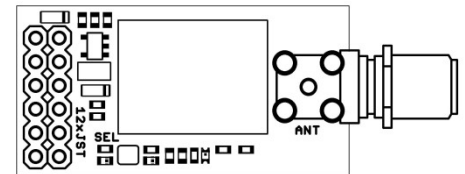


Features:

- On-board low noise 3.3 V voltage regulator and RF filter for noise blocking
- **USB, I2C, SPI and UART** (Tx, Rx) **RAW** data out available
- **SMA** active antenna connector
- Time pulse LED 1, Time pulse LED 2
- 12 pin 6x2 row holes with pitch 2.54 mm
- u-center GPS evaluation software
- Extensive visualization and evaluation features
- Battery holder for 3 V type 621 Lithium battery
- Dimensions: **36x19 mm**
- Weight: **6.8 gr.**

Reference: ELT0065



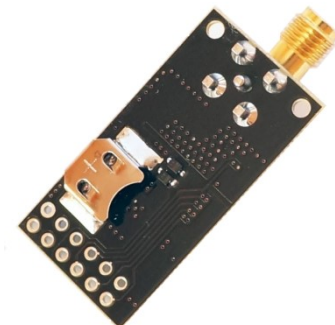
RX/SPI MOSI (+5V)
TX/SPI MISO (SCL/SPI CLK)
EXTINT1 (SDA/SPI CS)
USB D(+) (USB D(-))
EXTINT0 (TIMEPULSE)
TIMEPULSE(2) (GND)

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 (without external antenna)
External antenna requirements	Supply voltage 3.0 V Consumption current <50 mA