Fact Sheet
301275

Microtronics

rapidM2M T32x

Specifications

3D acceleration meter	±2 / ±4 / ±8 / ±16g
3D gyroscope	±125 / ±250 / ±500 / ±1000 / ±2000dps
Temperature sensor	-20...+60°C
Positioning	GNSS module (GPS/QZSS, GLONAS)
Power supply	1200mAh rechargeable battery
Serial interface [1) 2)]	1 x UART (2-wire) 1 x I²C (master)
I/O lines [1) 3)]	2 x GPIO or interrupt inputs
Outputs [1)]	1 x switchable 3,3V power supply
Operating temperature	-20...+60°C
Antenna connector	Internal antenna
USB interface [4)]	1 x USB-C device
Data memory	3MB internal flash memory
Dimensions (WHD)	76 x 60 x 23mm
Weight	70g
Data transmission	• LTE B1, B2, B3, B4, B5, B8, B12, B13, B14, B18, B19, B20, B25, B26, B28, B66 (M1) • LTE B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B66 (NB1/NB2)
SIM	Integrated SIM chip
Display	• Micro vibration motor (freely usable) • RGB-LED (freely usable)
Operation	Solenoid switch (freely usable)

[1)] only accessible when the housing cover is open

[2)] UART and I2C interface cannot be used simultaneously

[3)] individually configurable per I/O line

[4)] only for charging the rechargeable battery, debugging and device logic development

Application

The rapidM2M T32x is a compact, freely programmable ultra low power NB-IoT sensor for recording, processing and transmitting information. It is the perfect tool for developing and testing IoT applications in a real environment. The integrated sensors (3D acceleration meter, 3D gyroscope, temperature sensor and GNSS receiver) can be used to implement various IoT applications without any additional hardware costs. Thanks to the serial interfaces (UART and I²C), the 2 I/O lines and the switchable 3,3V supply, the rapidM2M T32x offers experienced developers the option of connecting additional sensors thus increasing the bandwidth of the IoT applications that can be realised. The housing of the rapidM2M T32x has a small storage space to store additional sensors. The rapidM2M T32x is fitted with the rapidM2M operating system ex-works and is fully functional. The IoT application can be created within a few hours with the help of the rapidM2M Studio .

Fields of application:

- Locating and monitoring of operating resources
- Locating of individuals, animals and objects
- Logistics

Product characteristics

- Programmable using rapidM2M Studio
- Extensive libraries
- Complete software function examples
- NarrowBand LTE Cat NB1 & LTE Cat M1 modem
- Very low energy consumption
- Fuel Gauge IC to monitor the energy consumption
- Integrated sensors (3D acceleration meter, 3D gyroscope, temperature sensor)
- Positioning via GNSS module
- Expandable (UART, I²C, GPIOs and interrupt inputs)
- Measurement value storage on the device
- Small dimensions (76 x 60 x 23mm)
- Integrated durable SIM chip

Scope of supply	Order number
rapidM2M T32x	301275