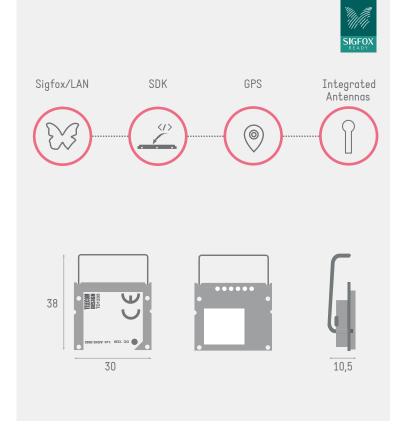


This high-end module for a faster and easier geolocation!

This high-end module embedded all TD next skills in Sigfox network, GPS & accelerometers sensors and design of antennas.

Just add a battery to your TD1205... and that's all! The world of geolocation awaits you!



Product description

Sigfox/LAN

TD next's TD1205 devices are high performance, low current SIGFOX™ gateways, RF transceiver and GPS receiver with integrated antennas.

The combination of a powerful radio transceiver, a state-of-the-art ARM Cortex M3 baseband processor and a high-efficiency GPS receiver achieves extremely high performance while maintaining ultra-low active and standby current consumption.

The TD1205 device offers an outstanding RF sensitivity of -126 dBm while providing an exceptional power radiated from integrated antenna of up to +14 dBm.

The TD1205 device versatility provides the gateway function from a local Narrow Band ISM network to the long-distance Ultra Narrow Band SIGFOX™ network at no additional cost.

Moreover the fully integrated on-board GPS receiver combines outstanding sensitivity with ultra low power which allows you to achieve excellent accuracy and Time-To-First-Fix performance.

Combining the SIGFOX™ network possibilities with accurate geolocation will give you access to a brand new world of embedded applications.

The TD1205 also embeds an ultra-low power 3D accelerometer with motion and free fall detection to further extend application range.

Featuring an AES encryption engine and a DMA controller, the powerful 32-bit ARM Cortex-M3 baseband processor can imple ment highly complex and secure protocols in an efficient environ mental and very low consumption way. Eventually the integrated antennas for both SIGFOXTM and GPS make the TD1205 a turnkey solution which does not require any additional design.



Sigfox certified Gateway & RF transceiver with antennas

Frequency range = ISM 868 MHz Receive sensitivity = -126 dBm

Modulation

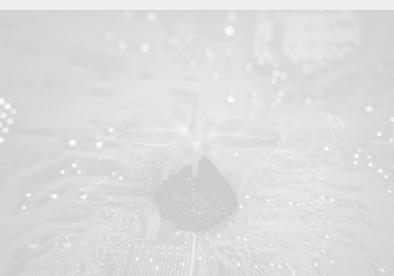
- (G)FSK, 4(G)FSK, GMSK
- $\cdot \, \mathsf{OOK}$

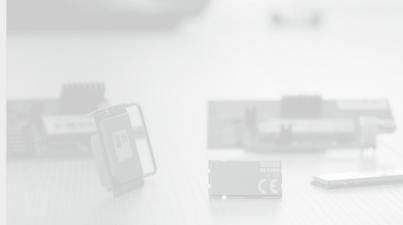
Max output power

• + 14 dBm

Low active radio power consumption

- 20 μA RX (windowed mode)
- 95 mA TX @ +10 dBm





Multi-GNSS GPS Receiver with active antenna

Multi-GNSS support

- · GPS/GLONASS
- · SBAS augmentation services

Ultra-low power consumption

- 29 mA Acquisition
- 12 μA Backup

High sensitivity

- 56-channel engine
- · -162 dBm Tracking
- · -148 dBm Cold start

Board characteristics

Power supply = 2.3 to 3.6 V 2.5 μ A idle state consumption

Small form factor: 30x38x10.5mm

Green and red led

Ultra-low power 3D Accelerometer

Up to +/- 16g full scale



