

# nanoTAG RTLS Tag

## High throughput location and monitoring solutions

### Flexible Monitoring and Location Solutions

The *nanoTAG RTLS Tag* with integrated antenna and rechargeable battery has been originally developed for professional child care applications with more than 200 pre-school students. Together with *nanoANQ RTLS Anchors* and Nanotron's Location Server, it forms the basis for monitoring attendance, movement, and care center service delivery.

The tag features an application controlled push button and a status LED as well as a bi-color battery status indicator.

Through its air interface, the *nanoTAG RTLS Tag* supports bidirectional payload exchange between the Location Server and individual tags.



nanoTAG RTLS Tag

It features a power amplifier that is adjustable from 0 to +18 dBm to allow for robust range, high area coverage and compliance with regulations.

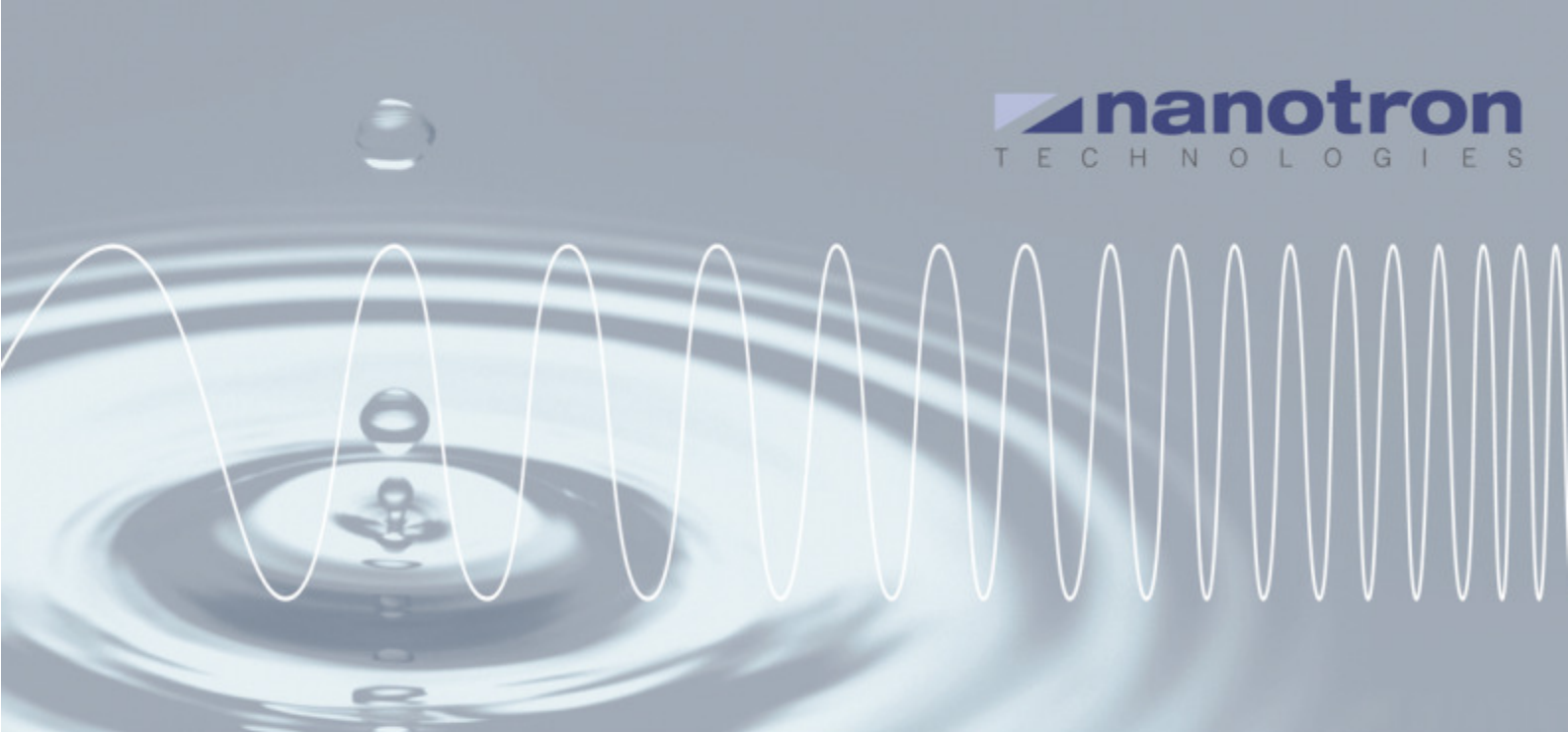
The tag is configurable via its wireless interface, supports TOA and TDOA RTLS systems as well as point to point and point to multipoint safety applications.

### Key Features

- Typical range ..... 50 m
- Typical location accuracy ..... 1-3 m
- RTLS update rate (configurable) ..... 1/60 – 100 Hz
- Tag configuration ..... Via air interface
- RF technology ..... Chirp Spread Spectrum (CSS)
- Charging ..... 5V USB
- Battery charging time ..... 3h max
- RF output power ..... Configurable 0 to +18 dBm
- Operating temperature range ..... 0 – 70 C
- Receive sensitivity (22MHz, 250kbps) ..... -95 dB
- Dimensions (with housing) ..... 53 x 35 x 15 mm
- Sensors ..... Acceleration and Air Pressure
- Weight ..... 15 grams

### Housing

The *nanoTAG RTLS Tag* includes a lightweight housing with a loop ring for attaching a wrist strap or lanyard. With the loop ring, the housing measures approximately 53 x 42 x 15 mm.



### Power Supply

The *nanoTAG RTLS Tag* uses a single 160 mAh Lithium Ion Polymer rechargeable battery, which is connected to the tag on the bottom side of the device.

Using a mini-USB connector, the battery can be recharged in a maximum of 3 hours. The charging circuit provides overheating protection.

The charging temperature range is from 5 to 40 °C. When the battery is being charged, a bi-color battery status LED is illuminated.



nanoTAG RTLS Tag Housing

### Tag Firmware

TDOA functionality is supported through the standard tag firmware. Parameters such as the tag blink rate could be configured through the tag air interface.

Custom firmware could be developed with the help of the tag module development option.

### Ordering Information

The tag is available complete with housing, battery and user interface or alternatively as a bare-board module that allows the user to add a custom power supply and user interface.

Number	Description
BNUT01	nanoTAG - RTLS Tag
BNUT01S	nanoTAG - RTLS Tag with Sensors
BNUT01M	nanoTAG - RTLS Tag Module
BNUT01MS	nanoTAG - RTLS Tag Module with Sensors
BNUT01DMS	nanoTAG - RTLS Tag Development Module with Sensors
PNPS01	nanoPAL - RTLS Tag Configuration Station
KNRTB01	nanoPAL - RTLS Tool Box

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