

## nanoANQ V2 RTLS Anchor

### High throughput location and monitoring solutions

#### Flexible Monitoring and Location Solutions

The *nanoANQ V2 RTLS Anchor* has been developed for use with nanotron's high throughput location and monitoring solutions in harsh environments. Together with nano-LOC based tags and nanotron's Location Server, it forms the basis for location-aware monitoring and management solutions.

At only 119 mm x 98 mm x 18 mm, the compact design simplifies system deployment and eliminates the need for dedicated antennas. It features SMA antenna connectors, an Ethernet port with PoE to connect to the transport network and a USB port. Through its air interface, the *nanoANQ RTLS Anchor* supports bidirectional payload exchange between the Location Server and individual tags.

Services and functionality can be updated by simply upgrading the firmware of the device.

The device provides a power amplifier that is adjustable from 0 to +19 dBm for robust range, wide area coverage and compliance with regulations.

Easy to install and maintain, the anchor is configurable in software remotely via a TCP/IP connection.

#### Key Features

- Location acquisitions..... > 250 Hz
  - Position acquisition time .....500  $\mu$ s
  - Typical range..... 100 – 300m\* m
  - Typical location accuracy..... 1-3 m
  - Minimum RTLS infrastructure .....6 nanoANQ
  - RF technology .....Chirp Spread Spectrum (CSS)
  - Power supply..... PoE class 2 (rec.)  
.....USB, DC-IN (opt.)
  - DC-IN voltage..... 12 to 24V DC
  - RF output power ..... Configurable 0 to +19 dBm
  - Operating temperature range..... -30 to 65°C
  - Transport Network ..... Ethernet 100 base TX
  - IP Addressing..... Automatic, DHCP
  - Typ. RX sensitivity (80MHz, 1Mbps)) ..... -89 dBm
  - Dimensions of the module ..... 119 x 98 x 18 mm<sup>3</sup>
  - Weight: ..... 63 g
- \* Depends on topology and antenna

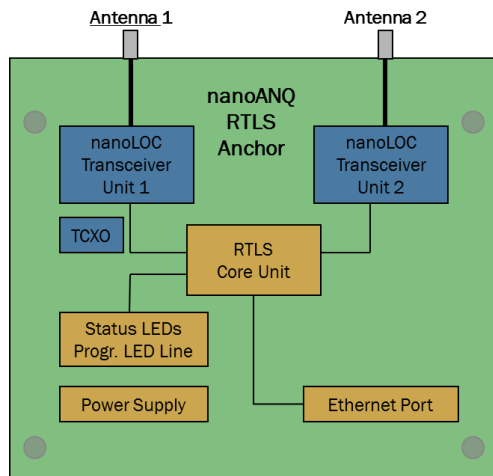


Figure 1 nanoANQ V2 RTLS Anchor Block Diagram

## Power Supply

Three power supply options are available: The recommended power supply is via Power-Over-Ethernet (PoE). Optionally, the USB port can be used as long as enough measures against surge and lightning have been taken. The optional DC IN supply can be provided by a wide range of voltages from 12 to 24 V.

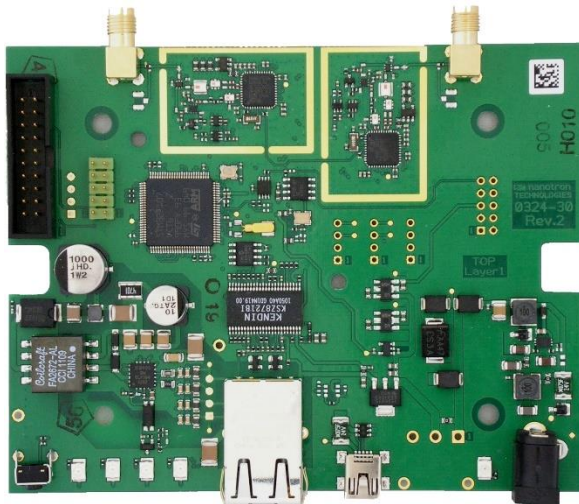


Figure 1 nanoANQ V2 RTLS Anchor Module, PoE – Rev. 2

## Ordering Information

The nanoANQ V2 is an ideal entry point into tracking with Chirp-Technology especially if used in conjunction with swarm bee LE v2 DK+ Development Boards.

Order No.	Description
BNAR02P	nanoANQ V2 (PCB) with PoE and SMA connectors, incl. nanoLES 3 license
KNRINT01	RTLS Integration Kit with 8 x nanoANQ V2 including antennas and nanoLES 3 license
BN02SWBLP	swarm bee LE v2 DK+, including antennas

### About nanotron

Nanotron is a leading provider of electronic location awareness solutions. If knowing what, where and when is mission-critical to your business, rely on nanotron with Location Running. Nanotron's solutions deliver precise position data augmented by context information in real-time. Location Running means, reliably offering improved safety and increased productivity, 24 hours a day, 7 days per week: Location-Awareness for the Internet of Things (IoT).

Nanotron Technologies GmbH is a wholly owned subsidiary of Sensera Limited (ASX: SE1), an IoT solution provider that delivers sensor-based products transforming real-time data into meaningful information, action and value.

Visit [www.nanotron.com](http://www.nanotron.com) or for more information on nanotron's complete line of products and tools or write to us at nanotron Technologies GmbH, Alt-Moabit 60, 10555 Berlin, Germany.

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