nanoANQ EA RTLS Anchor
High throughput location and monitoring solutions

Flexible Monitoring and Location Solutions

The *nanoANQ EA 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 195 mm x 195 mm x 84 mm the compact design simplifies system deployment. It features external antennas and an Ethernet port with PoE to connect to the transport network. Through its air interface, the *nanoANQ EA RTLS Anchor* supports bidirectional payload exchange between the Location Server and individual tags.
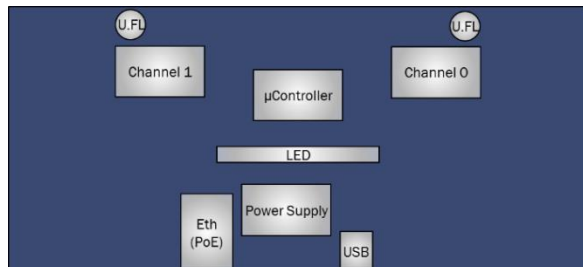

Figure 1 nanoANQ RTLS Anchor Block Diagram

Services and functionality can be updated by simply upgrading the firmware of the anchor The device provides a power amplifier that is adjustable from 0 to +19 dBm for robust range, wide area coverage and in 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

Typical range in mining tunnel ....100 – 300 m*

Typical location accuracy........................... 1-3 m

Minimum RTLS infrastructure ...> 6 nanoANQ EA

RF technology......Chirp Spread Spectrum (CSS)

Power supply................... PoE (rec.) USB (opt.)**

RF output power .... Configurable 0 to +19 dBm

Operating temperature range............ -30 to 65 °C

Transport Network .... Ethernet 100 base TX

Receive sensitivity (80MHz/1µs).............-88 dBm

Dimensions .... 195 mm x 195 mm x 84 mm^3

Weight .... 495 g

IP Addressing........................... Automatic, DHCP

White LED Band ..... Controlled via nanoLES API

3 color status LED....Controlled via nanoLES API

* Depends on topology and antenna

** USB requires 1 A min. and a cable ≤ 1 m

Power Supply

The preferred power supply is via Power-Over-Ethernet (PoE). Optionally, the USB port can be used as alternative power source as long as enough measures against surge and lightning have been taken.

nanoANQ EA Housing

The *nanoANQ EA RTLS Anchor* is delivered in a robust housing providing protection against dust, moisture and water. Power supply and CAT6 Ethernet cables are connected through rubber-sealed openings at the back of the housing. The two SMA antennas are screwed to the housing.

Figure 2 nanoANQ EA housing with antennas

Mounting Options

nanoANQ EA could be easily mounted to walls or other flat surfaces with the help of the optional mounting accessories.
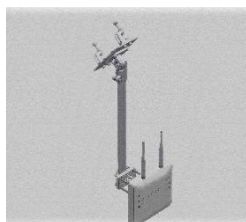

Adjustable Wall Holder

I-Beam Holder

Pipe Clamp

Angle Bracket

Figure 3 Mounting Options

Ordering Information

The Anchor is available complete with housing and antennas with optional mounting accessories.

Number	Description
BNAR02PYEA	nanoANQ EA (Edge Anchor) RTLS anchor (Chirp) , supplied with housing, standard mounting, including nanoLES license and external antennas
KNANQEV01CS	RTLS Evaluation Kit nanoANQ EA 4 x nanoANQ EA, 3 x swarm bee LE V2 DK+, nanoLES, RTLS Tools, OTA Configurator
BN02SWBLP	swarm bee LE v2 DK + Board incl. antenna
PSMB01WHN	Extra adjustable wall holder (standard)
PSMB01IHN	I-beam holder
PSMB01PCN	Pipe clamp
PSMB01ABN	Angle bracket

Sales Inquiries
nanotron Technologies GmbH
Alt-Moabit 60a
10555 Berlin, Germany

Europe/Asia/Africa: +49 (30) 399954-0
USA/Americas/Pacific: +1 (339) 999-2994
Mail: nanotronsales@inpixon.com
Web: www.nanotron.com, www.inpixon.com

About nanotron, An Inpixon Company
Nanotron Technologies GmbH, an Inpixon company (Nasdaq: INPX) 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).

Subject to change without notice.