

nanoANQ EA ER RTLS Anchor

High throughput location and monitoring solutions

Flexible Monitoring and Location Solutions

The *nanoANQ EA ER RTLS Anchor* has been developed for use with nanotron's high throughput location and monitoring solutions in harsh environments. Together with UWB based tags and nanotron's Location Server nanoLES 3, 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 ER 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 anchor.

Key Features

- Location acquisitions..... > 250 Hz
 - Typical range in mining tunnel 0.1 – 50 m*
 - Typical location accuracy..... 30 cm
 - Minimum RTLS infrastructure ... > 6 nanoANQ EA
 - RF technology Ultra-Wide Band (UWB)
 - RF output power -14 to -10 dBm
 - Transmit power density < -41.3 dBm / MHz
 - Channel 5, 6.8 Mbps
 - RF sensitivity @ 110 Kbps -96 dBm typ.*
 - RF sensitivity @ 6.8 Mbps -84 dBm typ. *
 - Power supply..... PoE (rec.) USB (opt.)**
 - Operating temperature range..... -30 to 65 °C
 - Transport Network Ethernet 100 base TX
 - Dimensions 195 mm x 195 mm x 84 mm
 - Weight 800 g
 - IP Addressing..... Automatic, DHCP
 - White LED Band Controlled via nanoLES API
 - 3 color status LED.... Controlled via nanoLES API
- * Mode dependent
** USB requires 1 A min. and a cable ≤ 1 m

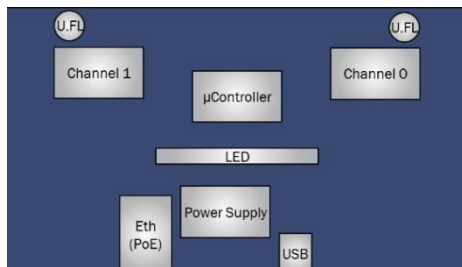


Figure 1 *nanoANQ RTLS Anchor Block Diagram*

The power of the device is adjustable from -14 to -10 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.

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 ER Housing

The *nanoANQ EA ER 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 ER housing with antennas

Mounting Options

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



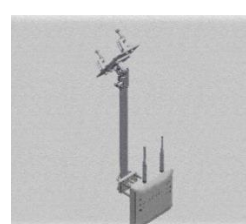
Adjustable Wall Holder



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
BN01ANQEMPXER	nanoANQ EA ER (Edge Anchor) RTLS anchor (UWB) , supplied with housing, standard mounting, including nanoLES license and external antennas
KN01ANQEMER	RTLS Evaluation Kit nanoANQ EA ER 4 x nanoANQ EA ER, 3 x swarm bee ER DK+, nanoLES, RTLS Tools, OTA Configurator
BN01SWBEP	swarm bee ER DK + Board incl. antenna
PSMB01WHN	Extra adjustable wall holder (standard)
PSMB01IHN	I-beam holder
PSMB01PCN	Pipe clamp
PSMB01ABN	Angle bracket

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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.