ICTRAC quad Tag

radino40 DW1000 - Ultra Wide Band Radio Module for Ranging and Real Time locating Systems (RTLS)

* IEEE802.15.4-2011 UWB compliant
* Supports 6 RF bands from 3.5 GHz to 6.5 GHz
* Data rates of 110 kbps, 850 kbps, 6.8 Mbps
* 32-bit ARM® Cortex®-M4 CPU with FPU, 64 MHz
* allows down to 10cm accuracy for distance measurements
* CE + FCC certified

Applications:
 * **ICTrac** High speed, high density Real Time Locating System
    + up to 100 Hz update rate for X,Y,Z calculations, independent from number of tags
    + no restriction in number of tags
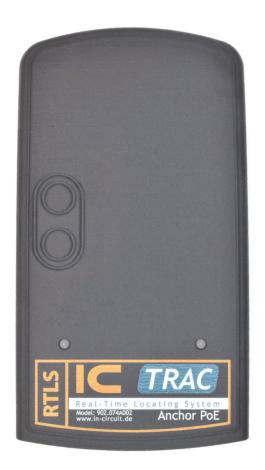
ICDWpro Anchor PoE - Setup and read out Tags via UWB

ICTRAC Anchor - UWB device with Ethernet connection

* supports 6 RF bands from 3.5 GHz to 6.5 GHz
* up to 100 Hz update rate, independent from number of tags
* no restriction in number of tags
* high precision time source

ICTRAC Tag
* supports 6 RF bands from 3.5 GHz to 6.5 GHz
* possible ultra deep sleep down to 8µA
* supports BLE
* 6 Axis IMU
* Lipo with integrated charger
* beeper
* vibrator

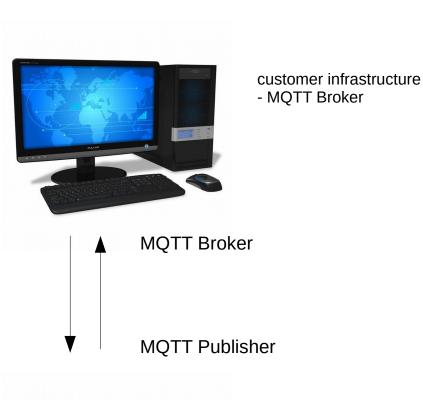**ICcase** - transport, charging and data collection
 * 105 charging sockets for In-Circuit UWB Tags
 * up to 40A sum charge current
 * active cooling
 * transport tags in deep sleep mode

IN-CIRCUIT
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www.in-circuit.de

ICTRAC Setup

IC Case Charging/Transport
#902.076C (105 Tags)

Anchors

ICTRAC Anchor PoE
#902.074A002

customer infrastructure
- MQTT Broker

MQTT Broker

MQTT Publisher

Time References

Tags
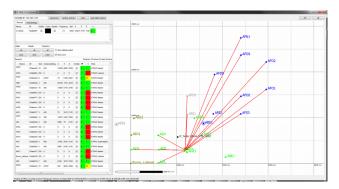
ICTRAC quad Tag
#902.079A009
#902.079A010

ICTRAC Gateway
- ICTRAC Controller
  - connects to anchors and listeners
  - setup of PoE devices
  - read heartbeats and tag-data
  - runs the MQTT publisher
- ICTRAC Visualizer
  - configuration and visualisation
  anchors and listeners (position, role
  etc.)
  - shows tag positions and data
  - runs locally or remotely
- IC License Server (LCS)
  - licensing of tools via USB-stick
- IC Updater
  - OTA updater

Listeners

ICTRAC Anchor PoE
#902.074A002

Tag data

ICTRAC Controller

ICTRAC Visualizer

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