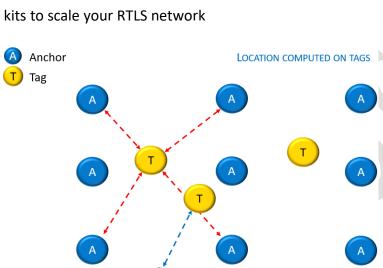


# PRODUCT INFORMATION: MDEK1001

# Evaluation and development kit based on DWM1001

- Demonstrate accurate location & navigation with 12 configurable devices (anchors or tags) based on the Decawave DWM1001 module
- Out-of-the-box wireless Real-Time Location System (RTLS) evaluation
- Quickly evaluate DWM1001 module capabilities
- APIs to customise the Firmware to your application
- Combine several kits to scale your RTLS network



## **Kit Contents**

12 DWM1001-DEV boards configurable as anchors, tags or gateway. (Gateway requires a Raspberry Pi)

Configuration & Visualisation

- Plastic enclosures for all development boards
- USB cable for flashing & debugging (can also provide power via USB power supply or battery pack)
- **Quick Start Guide**

#### Software

- Embedded Firmware binaries (tag, anchor, gateway)
- Mobile Application (requires a Tablet or Smartphone running Android 6.0 or later)
- Web client (Q1 2018)

## **Power Sources**

- Units require 12 x batteries and / or USB power supplies (not included):
  - 3.7V RCR123a or 16340 Rechargeable battery. Note: overcharge protection not necessary
  - Anchors and tags can be powered from USB power supplies / battery packs for long duration tests

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# PRODUCT INFORMATION: MDEK1001

## **Example Evaluation Steps – Android Application**

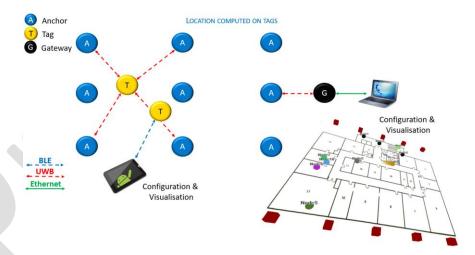
- Mount 4+ 'anchor' units on walls & use remainder as tags
- Discover and configure units with the Android application
- Upload a floorplan & visualise the tag locations on the screen
- Modify update rates directly from the Android application

# **System Performance**

- Maximum tag location rate: 10 Hz
- X-Y location accuracy: typically <10 cm
- Range: up to ~60 m in Line-of-Sight conditions
- Adaptive location rate using motion sensor activity enables longer battery life & higher tag density

# **Expand to a Centralised System**

- Configure dev. board as a bridge node & add to Raspberry PI (not included) for a Linux-based gateway
- View the location and configure the system on a PC using the location application















#### **Get Started:**

- Learn more at: www.decawave.com/products
- Download the RTLS SW at www.decawave.com/support/software

#### Join the community:

- http://www.decawave.com/decaforum/

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The MDEK1001, as supplied from Decawave, has not been certified for use in any particular geographic region by any regulatory body governing radio emissions in such regions. Operation of the MDEK1001, or use of the MDEK1001 in the development of future devices, is at the discretion of the user and the user bears all responsibility for any compliance with regulations laid down by the authority governing radio emissions in the user's jurisdiction.

FCC NOTICE: This kit is designed to allow (i) product developers to evaluate electronic components, circuitry, or software associated with the kit to determine whether to incorporate such items in a finished product and (ii) software developers to write software applications for use with the end product. This kit is not a finished product and when cause harmful interference to licensed radio stations and that this device accept harmful interference. Unless the assembled kit is designed to operate under Part 15, Part 18 or Part 95 of the FCC Rules, the operator of the kit must operate under the authority of an FCC license holder or must secure an experimental authorization under Part 5 of the FCC