

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)
- 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, adhesive pads, right-angled USB connectors, colored stickers

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



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: <u>www.decawave.com/products</u>

Join the community: - http://www.decawave.com/decaforum/

- Download the RTLS SW at www.decawave.com/support/software

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