**Evaluation and development kit based on DWM1001**

- Demonstrate accurate location and 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 bridge node. (A DWM1001-DEV configured as bridge node and associated with a Raspberry Pi 3 model B will constitute a gateway)
- Plastic enclosures for all development boards
- USB cable for flashing and debugging (can also provide power via USB power supply or battery pack)
- Quick start guide, adhesive pads, right-angled USB connectors, coloured stickers

**Software**

- Embedded Firmware binaries (tag, anchor, gateway)
- Mobile Application (requires a 6.0 or more recent Android device)
- Web client for network configuration and monitoring

**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
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
- Point to Point range: up to 60 m in Line-of-Sight conditions
- RTLS scheme range: 25 to 30 meters between anchors (4+) and tags
- 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 and assemble with a Raspberry PI 3 model B (not included) to form a Linux-based gateway
- View the location and configure the system on a PC using the location application

Get Started:
- Learn more about us:
  www.decawave.com/product/mdek1001-deployment-kit/
- Join the community:
  www.decaforum.decawave.com

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