PRODUCT BRIEF

Gen4 AoA CoreRTLS Tag - Asset Tracking Applications

CHW-TAG4000 v1.4

KEY FEATURES

- Highly accurate 3D positioning down to 10 cm with the Gen4 CoreRTLS system
- CoreHW patented antenna technology
- Based on Bluetooth® Angle-of-Arrival technology
- Long range with transmit power up to +10 dBm
- Accelerometer
- Temperature sensor
- Programmable button
- Battery life up to 3 years
- Over-The-Air (OTA) FW update
- Remote configuration capability
- IP67 protection rating
- UV protected materials
- Operating temperature range -30 to +85 °C (depending on the used battery)
- 42 mm x 59 mm x 15.5 mm
- Weight 28 g
- Custom color options possible; availability assessed upon request.



Figure 1. CHW-TAG4000 Asset Tag.

APPLICATIONS

- Real Time Location System (RTLS)
- High accuracy indoor or outdoor asset tracking

DESCRIPTION

The CoreRTLS Asset Tag CHW-TAG4000 is ideal for indoor or outdoor RTLS (Real time location system) which require high accuracy, providing position accuracy down to ±10 cm in the most demanding radio environments.

The CoreRTLS Tag contains CoreHW patented antenna technology which provides superior immunity to RF multipath effects compared to common PCB or chip antenna technologies, allowing it to maintain the highest accuracy even in the most challenging RF environments. CoreHW proprietary range extender device gives the Tag selectable transmit power up to +10 dBm, enabling more reliable tracking at long range.

The CoreRTLS Tag with CoreHW firmware sends CTE (Constant Tone Extension) packages that support AoA and provides data communication and tag configuration. The firmware is updateable over-the-air, enabling easy system updates.

The internal accelerometer can be used to detect movement, allowing the tag to remain in lower power modes when stationary, helping to extend battery life. When in motion, it can shift to faster interval modes, enabling high accuracy, low latency motion tracking.

The programmable button enables implementation of location-aware events.

The physical design of this product is optimized for fixed mounting use cases as seen in Figure 1. With an IP67 protection rating, extreme UV protection, and wide ambient temperature range, it is suitable for either extreme outdoor environments or indoor applications.

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