CHW-TAG4001, CHW-TAG4002

KEY FEATURES

- Highly accurate 10cm positioning
- CoreHW patented antenna technology
- Bluetooth® 5.1 Angle of Arrival technology
- Antenna pattern diversity
- Long range with Pout up to +10dBm
- Accelerometer
- Temperature sensor
- Programmable duress alarm button for healthcare staff & patients
- Battery life up to 5 years in most use cases
- Up-to 450m range with CoreLocator
- Over-The-Air (OTA) FW update
- Remote configuration capability
- Protection rating IP67
- Temperature range -30 to +60°C
- 42mm x 52mm (1.65 x 2.05 inch)
- Thickness: 15.5mm (0.61 inch)
- Available as outdoor versions with extreme UV protection
- Available in custom colors
- Customized logo available as an option

APPLICATIONS

- Real time location systems (RTLS)
- High accuracy personnel tracking for healthcare staff & patient applications
- High accuracy personnel tracking for indoor and outdoor applications

Figure 1 – CHW-TAG4001 Wrist Tag & CHW-TAG4002 Lanyard Tag

DESCRIPTION

The CHW-TAG4001 and CHW-TAG4002 are ideal for RTLS personnel tracking applications which require high accuracy, providing position accuracy down to +/-10cm in the most demanding radio environments.

The CHW-TAG400x contains CoreHW patented antenna technology, which mitigates random tag orientations, making it ideal for wearable personnel applications. It also 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. The CoreHW proprietary Range Extender gives the CoreTag selectable transmit power up to +10dBm, enabling more reliable tracking at long range or in non-line-of-sight conditions.

A Bluetooth Low Energy device with CoreHW firmware sends Bluetooth CTE signals to support AoA, and also uses BLE for communication and tag configuration. The firmware is updateable over-the-air, enabling easy system updates.

The internal accelerometer can be used to detect movement and orientation, 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 tactile switch enables implementation of location-aware alerts, such as personnel duress alarm button.

The physical design of this product is optimized for wrist-worn or lanyard use cases as seen in Figure 1. With an IP67 protection rating, it is compatible with normal washing and sanitizing activities. Both tags are available as outdoor versions with extreme UV protection.

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