

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 Programmable Pout up to +13dBm
- Accelerometer
- Temperature Sensor
- Programmable Tactile Switch
- Battery Life over 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 53mm (1.65 x 2.09 inch)
- Thickness: 15.5mm (0.61 inch)
- Available in three different color themes
- Customized Logo Available as an option

APPLICATIONS

- Real Time Location Systems
- Highly Accurate Personnel Tracking for Healthcare or Hospitality Applications



Figure 1 – CHW-TAG4001 / 4002 Appearance (wrist or hanging)

DESCRIPTION

The CHW-TAG400x is ideal for personnel and asset 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 +13dBm, 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 alarm button.

The physical design of this product is optimized for wrist-worn or hanging use cases as seen in Figure 1. With an IP67 protection rating, UV protection, and wide temperature range, it can be worn indoors or outdoors, and is compatible with normal washing and sanitizing activities.