

### CHW-TAG4000

#### 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 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
- Extreme UV protection
- Operating temperature range -30 to +85°C \*
- 42mm x 59mm (1.65 x 2.32 inch)
- Thickness: 15.5mm (0.61 inch)
- Available in custom colors
- Customized logo available as an option

#### APPLICATIONS

- Real time location systems (RTLS)
- High accuracy indoor or outdoor asset tracking



Figure 1 – CHW-TAG4000 Asset Tag

#### DESCRIPTION

The CHW-TAG4000 is ideal for indoor or RTLS which require high accuracy, providing position accuracy down to +/-10cm in the most demanding radio environments.

The CHW-TAG4000 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's proprietary Range Extender device, 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, 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 location-aware alerts.

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.

\* Depending on used battery