

CoreRTLS-LOC4000**KEY FEATURES**

- Highly accurate 3D positioning down to 10 cm with the Gen4 CoreRTLS system
- CoreHW proprietary antenna technology
- Based on Bluetooth® Angle-of-Arrival (AoA) technology
- Long range using CoreHW range extender
- Connectivity & interfaces:
 - 100 Mbps full duplex Ethernet
 - 5 GHz Wi-Fi
- 802.3at Power-over-Ethernet or 5V via USB-C
- Power consumption <2 W
- Dimensions: 206 mm x 206 mm x 47 mm
- Weight: 740 g
- VESA 50/75/100 mounting
- IP44 protection rating
- Operating temperature range: -30 to 60 °C

KEY BENEFITS

- Our most accurate AoA system when used with Gen4 CoreRTLS Tags
- Higher radio link budget margin for better system robustness and reliability
- Lower tag transmit power requirements enables tags with longer battery life or smaller batteries
- Fewer locators needed for full area coverage

**Figure 1 – CoreRTLS-LOC4000 Locator****DESCRIPTION**

The CoreRTLS-LOC4000 Locator is a part of the full turnkey, ready-to-deploy Bluetooth® AoA-based CoreRTLS system. CoreRTLS provides low latency, secure operation, and highly accurate 3D positioning down to +/-10 cm, even in the most demanding radio environments.

The CoreRTLS-LOC4000 contains an optimized 16-element antenna array based on CoreHW's proprietary antenna technology, providing superior immunity to RF multipath effects and allowing it to achieve the highest possible accuracy even in the most challenging RF environments. The internal proprietary range extender improves sensitivity and supports transmit power up to +10 dBm, enabling reliable tracking and communication at longer distances. Locators can be used for firmware and configuration updates for CoreRTLS Tags.

CoreRTLS Locator controls the antenna array and receives the I/Q signals from each antenna element from incoming direction-finding packets. I/Q samples are transferred over either Wi-Fi or Ethernet to the CoreRTLS software for angle computation and 3D position estimation.

CoreRTLS Locator conveniently supports VESA mounting brackets for easy installation, and with an IP44 protection rating and wide temperature range, it supports a wide range of indoor installations.

APPLICATIONS

- Real Time Location System (RTLS)
- Asset or personnel tracking with high accuracy and low latency