



QTM-HMC10

Intrinsically Safe (HazLoc Cl.1 D. 1, ATEX, IECEx), Outdoor Wearable Tracker For Worker Safety and Operational Visibility.

ZEROKEY
SPATIAL INTELLIGENCE

QTM-HMC10 is a millimetre-accurate, intrinsically safe personal positioning device for safety and operational visibility. Users are alerted through vibration and audible alarm if they enter a configurable zones they are not authorized to enter or approach another device in a configurable minimum distance. QTM-HMC10 The wearable tracker provides the ultimate in hazard prevent, safety compliance, and hazardous zone operational visibility.



Intrinsically Safe, Waterproof and Dustproof

Certified intrinsically safe in North America with a Class I, Division 1, Groups A, B, C and D rating. Combined with an IP65 water and dust ingress rating, the QTM-HMC10 can be used in extreme conditions.



Reliable Performance In All Environments

Unlike Radio Frequency signals, ultrasonic signals are not impacted by metallic objects typical of industrial settings. Quantum RTLS delivers continuous hyper-accurate positioning in any environment.



Hyper-Accurate, Always Available at High Data Rates

Quantum RTLS technology uses ultrasonic signals to provide unmatched millimetre-level position accuracy. Fusing Received Signal Strength Indicator (RSSI) and Inertial Measurement Unit (IMU) technology ensures positioning is always available and works continuously at 20 times a second.



Real-Time Audible and Vibration Alarms

The QTM-HMC10 alerts users immediately when unsafe events are detected and when static or dynamic virtual zones are breached. An audible alarm, vibration motor, and RGB LED alert light are configurable to signal any manner of event.

Key Features

- Operable with all Quantum RTLS Intrinsically Safe Devices
- Intrinsically Safe certified (HazLoc Cl.1 D. 1, ATEX, IECEx)
- Waterproof and dustproof IP655 rating
- Supports up to 20m range
- 1.5mm 3D position accuracy
- Alerts users through vibration and audible alarm
- Configurable static or dynamic geo-fenced zones
- 24-hour battery life (typical)
- Rechargeable battery with USB-C connectivity





QTM-HMC10

Unprecedented Operational Visibility with Hyper-Accurate Data

Businesses can track and assess operational effectiveness in real-time and utilize contextual insights to optimize even the most complex workflows. Quickly and dramatically improve site safety compliance and event severity using real-time event alarms, digital event records, and dynamically configurable geo-fenced zones around hazardous locations.



Business Intelligence Through Spatial Intelligence

Quantum RTLS data is transformed into powerful insight using ZeroKey's Spatial Intelligence Platform. Captured or real-time data can be monitored, visualized, analyzed, and reported, resulting in true business intelligence through spatial intelligence. A modular plug-in interface allows an ala carte approach to targeting specific use-cases, integration platforms, and data flows.



Dimensions	72.1 x 47.2 x 19.4 mm
Weight	62g
Charge Port	USB-C
Ingress Rating	IP67
Battery Life	24 hours (typical usage)
Alert Modes	Vibration, audible alarm, LED
Ultrasonic Range	20m Max
Accuracy (Ultrasonic)	1.5mm
Accuracy (Fall Back)	2.5m
Update Rate	20 Hz
Wi-Fi Coexistence	Yes
Bluetooth Coexistence	Yes
Operating Temperature	- 40°C < Tamb < + 60°C
Operating Humidity	5 to 95% Noncondensing
RF Band	2.4 GHz ISM
RF Modulation	GFSK
RF Tx Power	8 dBm max
RF Rx Sensitivity	-92 dBm
RF Tx Burst Duration	2.8 – 3.2 ms
Ultrasonic Frequency Band	35.5 KHz +/- 0.1kHz
Ultrasonic Output	96 dB SPL (max)
Ultrasonic Duty Cycle	2.8% (min) 3.2% (max)
Certifications	FCC (US) / IC (Can) / CE (EU) / VCCI (JP) / K (KR) Intrinsically Safe Class I, Division 1, Groups A, B, C and D rating.

† Pat. US 9/977,113, US 10/051,599, US 10/448,357, US 10/627,479, US 10/736,075, US 10/893,502, CN109073740B, KR102252251B1, US 15/339,885, US 15/982,750, US 16/031,553, US 16/560,543, US 16/820,445, US 16/919,822.

See <https://zerokey.com/patents> for a complete list of patents applicable to this product.

1. For a single device only
v. 122022 *Information Subject to Change