QTM-SMR10

Wearable Tracker for Personnel Safety, Operational Visibility, and Digital Twinning

ZERØKEY
SPATIAL INTELLIGENCE

QTM-SMR10 is a millimetre-accurate personal positioning device for operational visibility, safety and digital twinning. Users are alerted through vibration and audio beep if they enter a danger zone or approach another device in a configurable minimum distance. QTM-SMR10 keeps your employees safe and your business operational.

Reliable Performance In All Environments
Unlike Radio Frequency signals, ultrasonics are not impacted by metallic objects typical of industrial settings. Quantum RTLS delivers rock solid, accurate positioning in all environments.

Hyper-Accurate, Always Available at High Data Rates
Quantum RTLS technology uses ultrasonic signals to provide unmatched mm-level position accuracy. Fusing Received Signal Strength Indicator (RSSI) and Inertial Measurement Unit (IMU) technology ensures positioning is always available and output at 20 Hz rates.

Real-Time Audio and Vibration Alarming
The QTM-SMR10 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.

Wireless and Wearable in Industrial Environments
QTM-SMR10 is equipped with a high-speed radio and a rechargeable battery capable of 24 hours of wireless operation. The durable clip secures the sensor to vests or clothing and ensures reliable positive retention in demanding industrial environments.

Push-Button for Event Triggering
The QTM-SMR10 push-button allows users to generate a man-down alert or to trigger external events in custom applications.

Rugged Industrial Design
Impact-resistant design with high grade materials intended for use in demanding industrial environments.

Key Features

- Interoperable with all Quantum RTLS Devices

- Supports up to 20m range

- 1.5mm 3D position accuracy[1]

- Alerts users through vibration and audio beep

- Configurable static or dynamic virtual alert zones*

- 24-hour battery life (typical)

1. Under unobstructed conditions with view to 6 anchor nodes with ideal geometry.

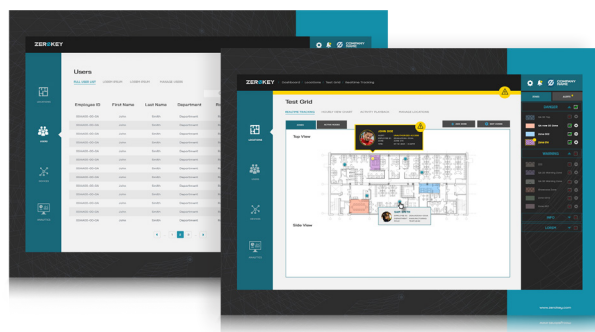* When used with supporting software platform.

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 productivity by using digital twin technology to optimize business processes.

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	Micro-USB
Battery Life	24 hours (typical usage)
Alert Modes	Vibration, audible alarm
Maximum Range	20m
Accuracy (Ultrasonic)	1.5 mm1
Accuracy (Fall Back)	2.5m
Update Rate	20 Hz
Wi-Fi Coexistence	Yes
Bluetooth Coexistence	Yes
Operating Temperature	-20 to 60oC
Operating Humidity	5 to 95% Noncondensing
RF Band	2.4 GHz ISM
RF Modulation	GFSK
RF Tx Power	0 - 8 dBm
RF Rx Sensitivity	-90 to -97 dBm
RF Tx Burst Duration	2.8 – 3.2 ms
Ultrasonic Frequency Band	50.0 kHz +/- 0.1 kHz
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)

*Information Subject to Change