



QTM-DMC10

Ultra-compact, rugged mobile node for track-and-trace and automated inventory applications.

ZEROKEY
SPATIAL INTELLIGENCE

QTM-DMC10 is an ultra-compact, millimetre-accurate positioning device that precisely digitizes asset location throughout entire supply chain workflows. Reliable positioning performance and smart powering options ensures material is accurately tracked through your entire supply chain in real time.



Hyper-Accurate, Always Available Position

Quantum RTLS technology uses ultrasonic signals to provide unmatched millimetre-level position accuracy. Fusing Received Signal Strength Indicator (RSSI) technology ensures positioning is always available whenever you need it.



Automated Inventory Counts and Real-Time Track-and-Trace

Inventory location tracking gives a comprehensive inventory count in real-time. Real-time track-and-trace of all products and orders in progress enables automation of material workflows in your supply chain.



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.



Smart Powering Options For All Product Workflows

QTM-DMC10 can be configured to report position on-demand, at a predefined interval or when motion is detected. Smart powering features maximize battery life to locate products throughout its life cycle.



Simple Design and Replaceable Battery

Impact-resistant design with high grade materials allows QTM-DMC10 to be used in demanding industrial environments. Nodes are powered by an easily-replaceable coin cell battery.

Key Features

- Interoperable with all Quantum RTLS devices
- 1.5mm 3D position accuracy
- Fusion with RSSI technology for high availability
- Long-range operation (20m)
- Convenient battery replacement
- Up to 6-month battery life
- Compact, rugged design
- Replaceable coin cell battery
- Flexible mounting options
- Water and oil resistant design
- Open-API and extensible plugin interfaces for seamless integration





4D Supply Chain Automation

Continuous, real-time, accurate location of all products during their lifecycle empowers a new frontier of supply chain optimization:

- Real-time reporting of inventory count and location
- Complete, continuous product and order traceability
- Shipping and receiving automation between facilities
- Theft prevention of high value goods
- Agile reslotting using spatial analytics



Seamless Spatial Analysis

ZeroKey's Spatial Intelligence Platform automatically organizes, identifies, and interprets spatial information in order to represent your enterprise operations in 4D. Spatial analysis becomes effortless as the complexity of understanding spatial data is eliminated. Inferences of spatial relationships become clear, allowing you to solve operational problems before they happen.

Dimensions	36 x 36 x 11 mm
Weight	13g
Accuracy (Ultrasonic)	1.5 mm ¹
Update Rate	20 Hz
Battery Power	CR2032 Coin Cell
Battery Life	Up to 6-months
Maximum Range	20m
Wi-Fi Coexistence	Yes
Bluetooth Coexistence	Yes
Operating Temperature	-20 to 60°C
Operating Humidity	5 to 95% Non-condensing
Shock	200g (max)
Vibration	3g (max)
Mounting Options	Screw, strap, adhesive, magnet, and velcro
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	50.0KHz +/- 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)

† 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.

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