



QTM-DWR10

Wearable Quantum RTLS Wristband Tracker for Hand Tracking, Process Digitization, Quality Control, and Digital Twinning.

ZEROKEY
SPATIAL INTELLIGENCE

QTM-DWR10 is a Quantum RTLS millimetre-accurate wristband positioning device that precisely digitizes hand movement during complex workflows. Low latency with high data-rates supports real-time quality control, along with operational visibility, safety and digital twinning.



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 at 20 Hz rates.



Digitize Human-Centric Processes Like Never Before

Human-centric processes are digitized with nearly infinite resolution to provide the quality and spatial context to generate true insight from your data.



Real Time Quality Control Eliminates Rework and Recall

Millimetre-accuracy precisely digitizes workflows to enable real-time quality control to ensure all process steps are completed correctly and in the right sequence.



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.



Wireless and Wearable in Industrial Environments

QTM-DWR10 is equipped with a high-speed radio and a rechargeable battery capable of 24 hours of continuous wireless operation. Available with a watch-style wristband or optional breakaway wristband for personal safety in demanding environments.

Key Features

- Interoperable with all Quantum RTLS Devices
- 1.5mm 3D position accuracy¹
- 20 Hz update rate
- Advanced tri-source sensor fusion with ultrasonic, RSSI and IMU integration
- Long-range operation (20m)
- 24-hour battery life
- Micro-USB rechargeable
- Lightweight, rugged enclosure
- Water, oil, and sweat resistant design

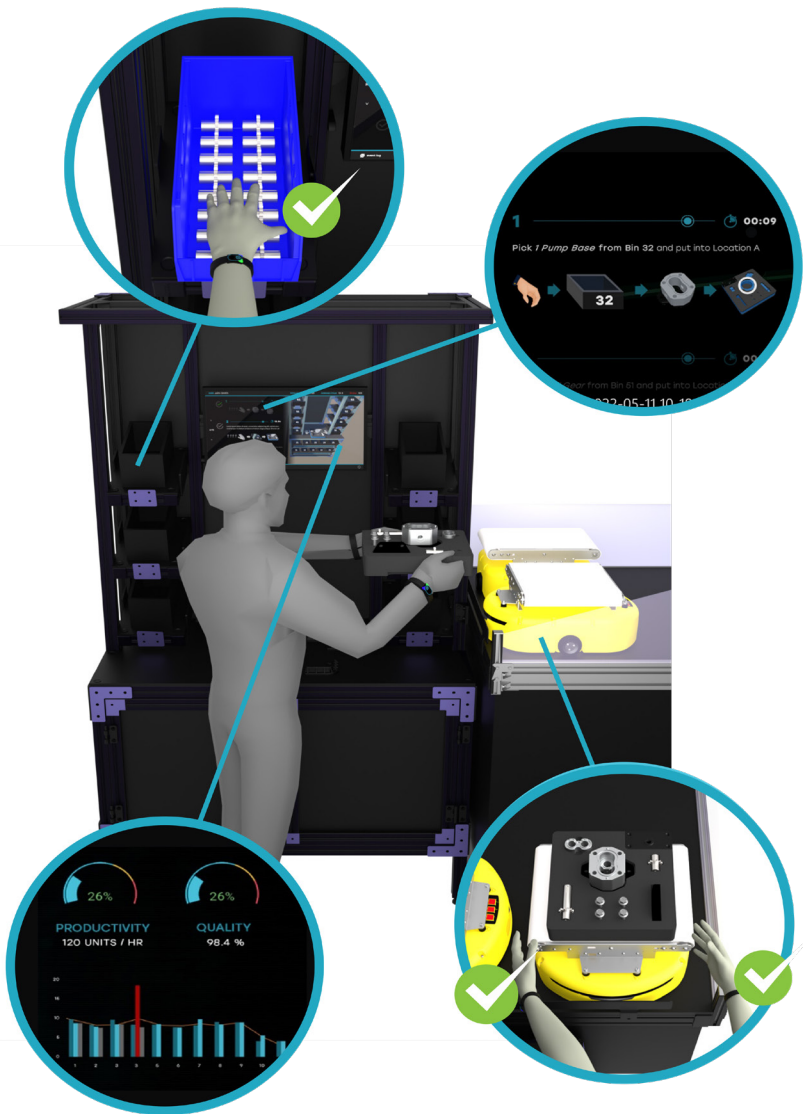




QTM-DWR10

Maximize Quality and Streamline Workflows

With high accuracy workflow digitization, tasks can be validated to ensure they are completed correctly and production targets are met, while step-by-step instructions can be displayed as users progress through their workflow. Cycle time data collection is automatic and empowers process optimization analytics, while human-to-machine interfacing can be automated.



| | |
|---------------------------|--|
| Dimensions | 37.5 x 25.5 x 13 mm (sensor) |
| Weight | 12g (sensor) |
| Accuracy (Ultrasonic) | 1.5 mm ¹ |
| Update Rate | 20 Hz |
| Battery Power | Li-ion Polymer Battery |
| Battery Life | 24 Hr |
| Maximum Range | 20 m |
| Wi-Fi Coexistence | Yes |
| Bluetooth Coexistence | Yes |
| Operating Temperature | -10° to 60°C |
| Operating Humidity | 5 to 95% Non-condensing |
| Shock | 200g (max) |
| Vibration | 3g (max) |
| Interfaces | Status LED, push button |
| Mounting Options | Watch Strap, Break-away Strap |
| 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.

v. 122022 *Information Subject to Change