



# 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 accuracy<sup>1</sup>
- 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

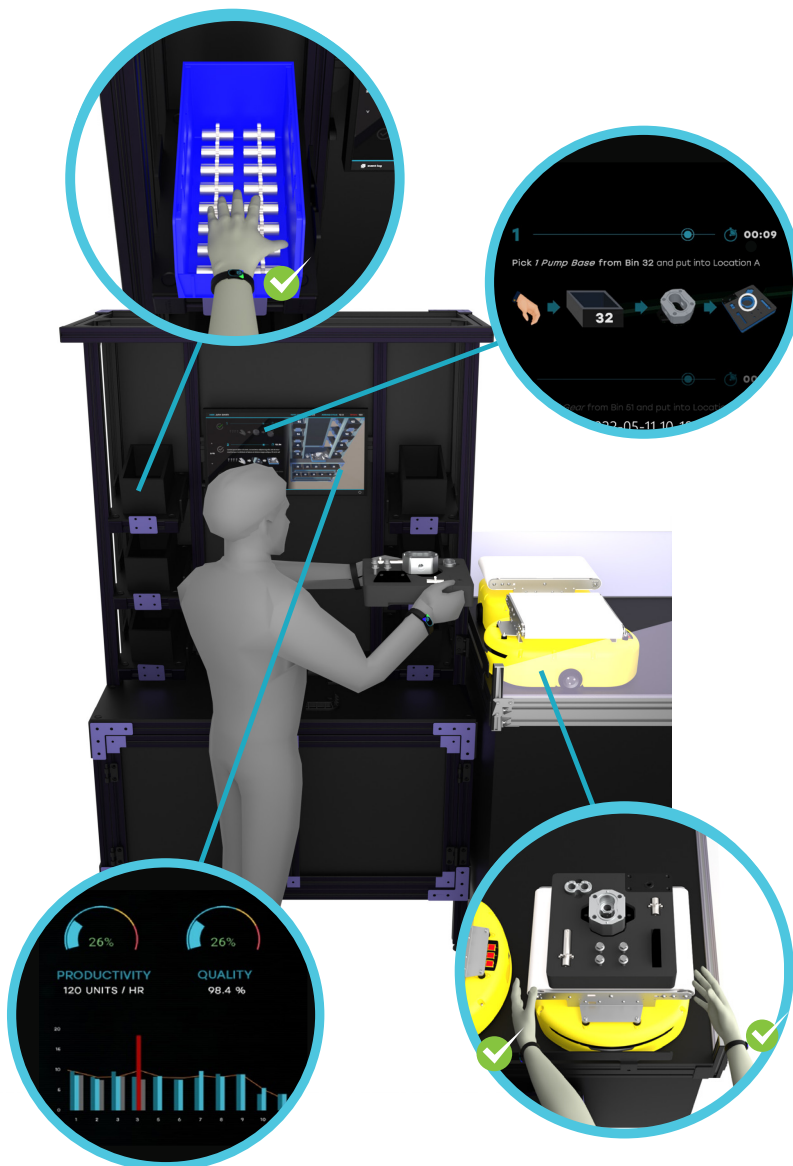




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## Maximize Quality and Streamline Workflows

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 <sup>1</sup>
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.

\*Information Subject to Change