**ZEBRA**

# TC22R Integrated Handheld RFID Reader

## Track assets easily with a lightweight, all-touch design

In an increasingly competitive marketplace, you need to stay a step ahead with asset tracking that's easy, intuitive, and efficient. The Zebra TC22R Integrated Handheld RFID Reader provides an integrated, lightweight, all-touch design that helps your associates keep track of assets and inventory for extended periods with less fatigue. Capture data in less time and with less effort using a TC22R handheld reader that delivers industry-leading performance, such as read rates up to 1,300 tags per second, in an all-in-one form factor.



## Accelerate your inventory management

### Ergonomic design for all-day comfort
The TC22R handheld reader combines real-time visibility with simplicity and ease of use. This lightweight reader enables workers to continue cycle counts with less fatigue than heavier devices.

That means you get the high performance that comes with field-proven Zebra software in a compact, all-in-one device.

### Simplified deployment
The TC22R handheld reader offers a fully integrated Android®-based solution that can be supported by mainstream MDMs, reducing deployment headaches and management overhead. And with the latest Bluetooth® and Wi-Fi™ capabilities, the TC22R handheld reader offers easy deployment that gives your business a competitive edge.

### Industry-leading performance
With a robust read rate of up to 1,300 tags per second, the TC22R handheld reader enables greater insights into asset movement and real-time data from the first mile to the last or from the front of the store to the back. In addition, because the TC22R handheld reader has an integrated NFC reader built-in that assists with mobile POS applications, you can capture data in less time and with less effort.

### Easy connectivity
With Wi-Fi 6 and Bluetooth, the TC22R handheld reader is easy to use and manage across your network. That means implementation takes less training time, allowing you to reduce deployment timelines and streamline configuration.

**Accelerate your inventory management with the TC22R Integrated Handheld RFID Reader.**
For more information, please visit www.zebra.com/tc22r

# Specifications

### Physical characteristics

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| **Dimensions** | 5.7 in. H x 3.3 in. W x 6.96 in. L<br>14.5 cm H x 8.4 cm W x 17.7 cm L |
| **Weight** | 20.07 oz. / 569 g |
| **Display** | 6.0 in. color Full High Definition+ (1080 x 2160), LED backlight, 450 nits |
| **Touch panel** | Multi-mode capacitive touch with bare or light gloved fingertip input |
| **Power** | User-removable, quick-release, rechargeable 7,000 mAh Li-Ion battery with PowerPrecision+ for real-time battery metrics |
| **Network connections** | WLAN, WPAN |
| **Notifications** | Audible tone, vibration |
| **Indicators** | Decode LEDs, battery status LED, beeper |
| **Keypad** | On-screen keypad |
| **Buttons** | User-programmable button for barcode scanning (default), PTT or other use, volume up/down, power |
| **User input** | Tri-function user-programmable trigger |
| **Interface ports** | USB 3.1 (Bottom Type C), Super Speed (host and client) |

### User environment

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| **Operating temperature** | 14°F to 122°F/-10°C to +50°C |
| **Storage temperature** | -40°F to 158°F/-40°C to +70°C |
| **IP sealing** | IP65 |
| **Humidity** | 5–95% non-condensing |
| **Electrostatic discharge** | ±15 kV air discharge<br>±8 kV direct discharge |
| **Tumble specification** | 500 cycles (1,000 drops, 1.6 ft./0.5 m) at room temperature |
| **Drop specification** | Multiple 5 ft./1.5 m drops to concrete |

### Performance characteristics

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| **CPU** | 5430 hexa-core 2.1 GHz |
| **Operating system** | Android: for supported versions, visit www.zebra.com/android-versions |
| **Memory** | 6 GB RAM/64 GB Flash |

### RFID characteristics

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| **Standards supported** | EPC Class 1 Gen 2; EPC Gen 2 V2 |
| **RFID engine** | Zebra Proprietary Radio Technology |
| **Maximum RFID read rate** | Up to 1,300 tags/sec |
| **Nominal RFID read range - integrated antenna** | 40 ft./12.2 m |

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| **Frequency range and RF system output** | US: 902–928 MHz; 4-34 dBm (EIRP)<br>EU: 865–868 MHz; 1.45-31.45 dBm (ERP)<br>916.3,917.5,and918.7MHz;3.3-33.3 dBm (EIRP)<br>3.3-33.3 dBm (EIRP)<br>AUS: 920-925 MHz; 3.1-35.1 dBm (EIRP) |

### Data capture

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| **Scanning** | SE4710 1D/2D scan engine |
| **Camera** | Forward-facing 16 MP camera, front-facing 5 MP camera |
| **NFC** | NFC ISO 14443 Type A and B; Mifare, FeliCa and ISO 15693 cards, NFC Forum tags 2,3,4,5; Host Card Emulation, Contactless Payment Support |
| **UHF RFID** | Refer to RFID Characteristics section |

### Wireless LAN

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| **WLAN radio** | IEEE 802.11a/b/g/n/ac/d/h/i/r/k/v/w/mc/ax; 2x2 MU-MIMO, Wi-Fi 6E (802.11ax), Wi-Fi certified; Wi-Fi 6 Certified, Dual Band Simultaneous; IPv4, IPv6 |
| **Data rates** | 6 GHz: 802.11ax—20 MHz, 40 MHz, 80 MHz, 160 MHz—up to 2,402 Mbps; 5 GHz: 802.11a/n/ac/ax—20 MHz, 40 MHz, 80 MHz, 160 MHz—up to 2,402 Mbps; 2.4 GHz: 802.11b/g/n/ax—20 MHz up to 286.8 Mbps |
| **Operating channels** | Channel 1–13 (2,401–2,483 MHz): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13; Channel 36–165 (5,150–5,850 MHz): 36, 40, 44, 48, 52, 56, 60, 64, 100,104,108,112,116,120,124,128, 132,136,140,144,149,153,157,161, 165; Channel 1–233 (5,925–7,125 MHz); Channel Bandwidth: 20/40/80/160 MHz; actual operating channels/frequencies and bandwidths depend on regulatory rules and certification agency |
| **Fast roam** | PMKID caching; Cisco CCKM; 802.11r; OKC |
| **Security and encryption** | WEP (40 or 104 bit); Enhanced Open (OWE); WPA/WPA2 Personal (TKIP and AES); WPA3 Personal (SAE); WPA/WPA2 Enterprise (TKIP and AES); WPA3 Enterprise (AES) — EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP, EAP-PWD; WPA3 Enterprise 192-bit mode (GCMP256) — EAP-TLS |

## Markets and applications

### Retail and Hospitality
- Inventory cycle counting
- Mobile POS/ line-busting
- Item finding

### Light Manufacturing
- Product and component tracking
- Work-in-progress

### Government
- Asset tracking
- Document management

### Transportation and Logistics
- Inventory cycle counting
- Loading verification
- Inbound/outbound verification

| Certifications | Wi-Fi Alliance Certifications: Wi-Fi CERTIFIED n, Wi-Fi CERTIFIED ac, Wi-Fi CERTIFIED 6 (Wi-Fi 6E), WPA2-Personal, WPA2-Enterprise, WPA3-Personal, WPA3-Enterprise (includes 192-bit mode), Protected Management Frames, Wi-Fi Enhanced Open, WMM (Wi-Fi Multimedia), WMM-Power Save, WMM-Admission Control, Voice-Enterprise, Wi-Fi Direct, Wi-Fi Agile Multiband, Wi-Fi QoS Management, Wi-Fi Optimized Connectivity, Passpoint |
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### Wireless PAN

| Bluetooth | Class 2, Bluetooth v5.2 |
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### Regulatory compliance

| Electrical safety | IEC 62368-1 (ed.2)<br>IUL 62368-1, second edition, CAN/CSA-C22.2<br>No. 62368-1-14 |
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| RFI/EMI/EMC | FCC Part 15 Subpart B Class B; ICES 003 Class B; EN 301 489-1; EN 301 489-3; EN 55035; EN 55032 Class B; EN 60601-1-2 |
| RF exposure | EU: EN 50364, EN 62369-1, EN 50566, EN 62311; USA: FCC Part 2. 1093 OET Bulletin 65 Supplement 'C'; Canada: RSS-102 |
| RFID | EU EN 302 208, FCC Part 15 Subpart C;<br>Canada: RSS-247 |