# MC9300 Handheld Mobile Computer

## The ultimate Android™ ultra-rugged combination keypad/touch mobile computer

Every day, over three million workers use an MC9000 Series mobile computer to streamline processes in warehouses and manufacturing plants all over the world. But now you need to handle and ship more orders every day, faster than ever. Introducing the mobile computer that can get it done, the MC9300 — the next evolution of the world's best-selling and most trusted enterprise mobile computer. Your workers get the ultimate in simplicity with Android, an operating system your workers already know well, a larger advanced touch display and more. Handle all of your applications with the ultimate in processing power and memory. New data capture capabilities include optional front and back cameras, extraordinary scan ranges and superior direct part mark (DPM) capture. The new battery runs twice as long as the MC9200 on a single charge. It's the most rugged MC9000 Series ever created, ready to outlast virtually every device in its class in any environment — including the freezer. New Mobility DNA solutions make device, OS security and battery management easy, while delivering better-than-ever robust wireless connections. And since you can run your existing TE apps right out of the box, migrating to Android couldn't be easier.

### The Ultimate Android Platform

**Maximum Processor Power and Memory**
The ultra-powerful 8-core processor combines with up to eight times the RAM and 16 times the Flash memory of the MC9200 to deliver superior performance on all your voice and data apps.

**Power a Full Shift and Beyond with Maximum Battery Power**
The PowerPrecision+ battery delivers the most battery power in its class — nearly twice the battery run time of the MC9200, plus fast charging and a wealth of battery statistics to better manage your battery pool. And with PowerPrecision Console, a free PC-based Mobility DNA tool, it's easy to identify and discard aging batteries, before they impact workforce productivity and your operations.

**Dependably Superior WiFi Connections**
With 2x2 Multiple-User Multiple Input Multiple Output (MU-MIMO) technology and WorryFree WiFi, a free Mobility DNA tool, you get increased WiFi range and speed, near instant application response times, unmatched roaming, exceptional voice quality and network diagnostics that help keep your WiFi network up and running at peak performance.

**A Lifetime Security Guard for Android**
With LifeGuard™ for Android™, you get the security updates you need to keep your Zebra Android devices secure every day they are in service — along with easy end-to-end control of the OS update process, plus support for future versions of Android.

### The Ultimate in Application Support

**Run Your Terminal Emulation (TE) Apps, Right Out of the Box**
Integrated support for your TE apps makes it easy to migrate from Windows to Android — no backend modification or user training required. And when you're ready to turn your 'green screen' TE apps into elegant touch-centric intuitive screens to boost productivity, Mobility DNA's All-touch TE makes it easy.

**Take productivity and efficiency to the next level in your warehouse with the next evolution in the world's best-selling industrial computer — the MC9300. For more information, visit www.zebra.com/mc9300**

**Larger Touchscreen with Advanced Technology**
The large multi-touch 4.3 in. WVGA display allows your workers to view more business data, while providing best-in-class indoor/outdoor readability and data input flexibility. Use a finger — even with a thick glove — or a stylus. And users can interact with the screen even if the display is wet.

**Bluetooth Low Energy (BLE) 5.0 for Twice the Speed and Four Times the Range**
Bluetooth peripheral performance is improved, while power requirements are reduced, extending battery cycle times.

**Ultra High-Resolution Photos and Videos Improve Productivity**
The optional 13 MP color rear-facing camera captures highly detailed photos and videos to document proof of condition, proof of compliance and more.

**Rich Locationing Support**
Easily implement locationing to boost operational efficiency with support for many technologies, including Visible Light Communication (VLC) via the optional front facing 5MP camera, plus WiFi, Bluetooth 5.0 BLE and Zebra's locationing solutions.

**Advanced Industrial Scanning and an Extraordinary Scan Range**
With our advanced scan engines, your workers can capture virtually any barcode in any condition, the first time every time. The SE4850 Extended Range Imager captures barcodes in hand and on your uppermost warehouse racks — from 3 inches to as far as 70 feet away. Our SE4770 and SE4750 imagers are ideal for standard range scanning. The SE4750 DPM enables dependable lightning-fast capture of virtually every direct part mark. And our 'tried and true' 1D SE965 engine offers Adaptive Scanning technology with the widest working range in its class.

**Vibrate Feedback Mode**
The optional vibrate mode is ideal in noisy warehouse environments, where the beep tone that signifies a successful scan can be virtually impossible to hear.

**The Best of Both Worlds — Touchscreen and Keypad Input**
Two data entry modes support TE apps today and Android intuitive, interactive apps tomorrow. Maximize key-based data entry simplicity with your choice of keypads and enable touch input for TE or Android apps now or in the future. And since you can easily swap keypads right in your facility, you can re-purpose devices or replace broken keypads instantly — no trip to the service depot and no device downtime.

**Capture Multiple Barcodes and Entire Forms with a Single Scan**
SimulScan makes it easy to capture labels on boxes and pallets that contain many barcodes, plus text fields.

**Doubles as Walkie-Talkie**
With Voice-over-IP (VoIP) support and pre-loaded PTT Express, your workers get push-to-talk capability. (License Required)

**All Day Comfort in the Most Scan Intensive Apps**
When you give your workers the MC9300, you give them a mobile computer designed for comfort, with the most proven ergonomics — a perfectly weighted device with a pistol-style grip.

**NFC for Simple Pairing**
With a quick tap, workers can pair the MC9300 with a ring scanner, mobile printer, headset and more with optional NFC.

## The Ultimate Ultra-Rugged Design for Every Environment

**The Most Rugged Device in its Class**
When it comes to handling the harshest environments, the MC9300 is at the top of its class. The MC9300 is virtually waterproof, drop-proof, dust-proof and tumble-proof, offering superior reliability. And Corning Gorilla Glass brings maximum scratch-and-impact resistance to two of the most vulnerable device features — the display and exit window.

**A Model for the Most Challenging Environments**
Regardless of whether your environment includes freezers, coolers or the presence of hazardous materials, there is an MC9300 model to meet your needs. The freezer model includes a heated scanner exit window and a freezer-rated battery. And the Class 1 Div 2 non-incendive model[1] enables mobile computing in areas with flammable gases and materials.

## The Ultimate Accessory Ecosystem

**New Accessories Minimize Charging Time, Maximize Backroom Space and More**
All new charging cradles take advantage of the new fast charging feature, enabling a 90% charge in four hours or less. New cradle configurations allow you to increase density and device flexibility to make the most of your backroom area. And the universal ShareCradle base is rack mountable and can accommodate the MC9300 and other Zebra mobile computers with the addition of the right adapter cup.

**Cost-Effectively Upgrade with Backwards Accessory Compatibility**
Use your existing MC9200 device charging solutions by simply adding an adapter cup, as well as the soft holster and handstrap.

# Specifications

## Physical Characteristics

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|---|---|
| Dimensions | 9.4 in. L x 3.5 in. W x 7.4 in. H<br>240 mm L x 88 mm W x 189 mm H |
| Weight | 26.9 oz./765g with battery |
| Display | 4.3 in. WVGA (800 x 480), color display |
| Imager Window | Corning Gorilla Glass |
| Touchpanel | Dual mode capacitive touch with finger, gloved finger or stylus input (conductive stylus sold separately); screen protector (sold separately); Corning Gorilla Glass with air gap (standard model) or optically bonded (freezer model). |
| Backlight | LED backlit display |
| Power | Rechargeable Li-Ion: 3.6V, 7000mAh, (Freezer Capacity battery — 5000mAh) Both batteries offer: PowerPrecision+ with improved battery technology for longer cycle times and real-time visibility into battery metrics for better battery management, fast charging (up to 2.4A); hot swap battery backup with temporary session persistence |
| Expansion Slot | User accessible MicroSD with 32GB SDHC and up to 256GB SDXC |
| Network Connections | USB 2.0 High Speed (Host and Client), WLAN and WPAN (Bluetooth) |
| Notification | Audible tone; Multi-color LED bar (between keyboard and display), haptic feedback |
| Keypad | Backlit, Field replaceable keypads; 58 Key Alpha-Numeric, 53 Key Alpha-Numeric STD, 53 Key Terminal Emulation (5250 and VT), 43 Key, 34 Key Numeric/Function, 29 Key Numeric/Calculation |
| Voice and Audio | Speaker, Microphone, PTT Voice (Internal Speaker and Bluetooth Wireless Headset Support). |

## Performance Characteristics

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| CPU | Qualcomm Snapdragon™ 660 octa-core, 2.2 GHz |
| Operating System | Upgradeable to Android 14 |
| Memory | 4 GB RAM/32 GB Flash pSLC |

## User Environment

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| Operating Temp. | **Standard:** -4°F to 122°F/-20°C to +50°C, **Freezer:** -22°F to 122°F/-30°C to +50°C |
| Storage Temp. | -40°F to 158°F/-40°C to 70°C |
| Humidity | **Standard:** 5% to 95%, non-condensing; **Freezer:** 5% to 95%, condensing (Condensation resistant model with integrated exit window heater) |
| Drop Specification | **Standard:** 10 ft. (3.1m) drops at room temperature per MIL-STD-810G, 8 ft. (2.4m) drops to concrete across temperature per MIL-STD-810G **Freezer:** 7 ft. (2.1m) drops to concrete across temperature per MIL-STD-810G. |
| Tumble Specification | 6,000 3.3 ft. (1m) tumbles; meets and exceeds IEC tumble specification. |
| Sealing | IP67 and IP65 per applicable IEC sealing specifications |

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| Vibration | 4 g's PK Sine (5 Hz to 2 kHz); 0.04 g 2/Hz Random (20 Hz to 2 kHz); 60 minute duration per axis, 3 axis |
| Thermal Shock | -40°F to 158°F (-40° C to 70°C) rapid transition |
| Electrostatic Discharge (ESD) | ± 15kVdc air discharge; ± 8kVdc direct discharge; ± 8kVdc indirect discharge |

## Interactive Sensor Technology (IST)

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| Ambient Light Sensor | Automatically adjusts display and keypad backlight brightness |
| Motion Sensor | 3-axis Accelerometer with MEMS Gyro |

## Data Capture

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| Scanning | **SE965:** 1D standard range laser scanner<br>**SE4750:** 1D/2D standard range omnidirectional imager<br>**SE4770:** 1D/2D standard range omnidirectional imager<br>**SE4750 DPM:** Direct Part Mark (DPM) imager<br>**SE4850:** 1D/2D extended range imager |
| Camera | **Front:** 5MP fixed focus, 2.0 aperture<br>**Rear:** 13MP autofocus, 2.2 aperture, flash LED generates balanced white light, support torch mode, supports rear camera barcode scanning |
| NFC | Tap to Pair, ISO 14443 Type A and B, Felica and ISO 15693 cards, P2P mode and Card Emulation via Host (HCE) support |

## Wireless LAN

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| Radio | IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/w; Wi-Fi certified; IPv4, IPv6, 2x2 MU-MIMO |
| Data Rates | **5GHz:** 802.11a/n/ac — up to 866.7 Mbps<br>**2.4GHz:** 802.11b/g/n — up to 300 Mbps |
| Operating Channels | Channel 1-13 (2412-2472 MHz); Chan 36-165 (5180-5825 MHz)<br>Channel Bandwidth: 20, 40, 80 MHz<br><br>Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency |
| Security and Encryption | WEP (40 or 104 bit); 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 (GCMP-256) — EAP-TLS; Enhanced Open (OWE)<br><br>FIPS 140-2 Level 1: Data in Motion and Data at Rest |
| Multimedia | Wi-Fi Multimedia (WMM and WMM-PS; Including TSPEC) |
| Certifications | WFA (802.11n, WMM-PS, 802.11ac, PMF, WMM-AC, Voice Enterprise, WiFi Direct and WPS 2.0) |
| Fast Roam | PMKID caching; Cisco CCKM; 802.11r; OKC |

## Wireless PAN

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| Bluetooth | Class 2, Bluetooth V5.0 with BR/EDR and Bluetooth Low Energy (BLE) Support |

## Markets and Applications

**Logistics**
- Receiving/put-away
- Inventory management
- Returns processing
- Cross dock operations
- EDI transactions/picking

**Manufacturing**
- Inventory management
- Supply-line replenishment
- Safety testing
- Quality control audits
- Parts tracking/track and trace

**Retail**
- Retail/inventory management
- Price audits/changes
- Back of store order fulfillment
- Store receiving

**Cold Chain**
- Receiving/putaway
- EDI transactions/picking
- Inventory management
- Supply-line replenishment
- Safety testing
- Quality control audits

**Government**
- Receiving/put-away
- Inventory management
- Returns processing
- Cross dock operations
- EDI transactions/picking

### Device Approvals and Compliance

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|---|---|
| **TAA (Optional on select configurations)** | Trade Agreement Act optional on select configurations Compliant, FIPS 140-2 (DIM and DAR) support; FIPS 140-2 Level 1: Data in Motion and Data at Rest |
| **Non-Incendive (NI)[1] (Optional on select configurations)** | Suitable for use in Class I, II, III Div 2 Safety: cULus Listing — ISA/ANSA 12.12.01 Gases: Class I — Groups A, B, C, D Dusts: Class II — Groups F, G Fibers and Flyings: Class III -20°C ≤ Ta ≥ +50°C T6 |

### Communication and Messaging

Workforce Connect PTT Express (included) provides instant push-to-talk small group communications across Wi-Fi networks. Workforce Connect PTT Pro (supported) provides a scalable network agnostic push-to-talk solution which also includes messaging, location services and two-way radio integration. Workforce Connect Voice client (supported) enables the MC9300 to function as a full featured mobile telephone with multi-line capability across Wi-Fi networks featured mobile telephone with multi-line capability across Wi-Fi networks.

### Environmental Compliance

**Environment**
• RoHS Directive 2011/65/EU; Amendment 2015/863
• REACH SVHC 1907/2006
A complete list of product and materials compliance, please visit:
www.zebra.com/environment

### Warranty

Subject to the terms of Zebra's hardware warranty statement, the MC9300 is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For complete warranty statement, please visit:
http://www.zebra.com/warranty

### Recommended Services

Zebra OneCare® Essential and Select support services
Zebra Visibility Services – VisibilityIQ™ Foresight or Asset Visibility Service

### Platforming

Mobility DNA, Enterprise MDK, Standard Android SDK and SOTI for Android, Analytics Agent
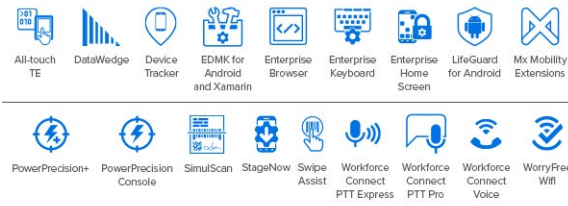
### Footnotes

1. Available in North America.

For details related to Common Criteria support, please visit:
www.zebra.com/commoncriteria

### Mobility DNA

Mobility DNA solutions help you get more value out of our mobile computers by adding functionality as well as simplifying deployment and management of our mobile devices. For more information on these Zebra-only features, please visit www.zebra.com/mobilitydna

Mobility DNA is available on Android only. Features may vary by model and a Support Contract may be required. To learn what solutions are supported, please visit: https://developer.zebra.com/mobilitydna

All-touch TE | DataWedge | Device Tracker | EDMK for Android and Xamarin | Enterprise Browser | Enterprise Keyboard | Enterprise Home Screen | LifeGuard for Android | Mx Mobility Extensions

PowerPrecision+ | PowerPrecision Console | SimulScan | StageNow | Swipe Assist | Workforce Connect PTT Express | Workforce Connect PTT Pro | Workforce Connect Voice | WorryFree Wifi