

TC8300 Touch Computer

The Revolutionary Enterprise Touch Computer with the Ultimate Android Platform

We took the TC8000, the world's most revolutionary enterprise touch computer design, and made it better. You get the same innovative ergonomic design that minimizes motion to deliver a 14 percent boost in worker productivity. We added the ultimate in processing power and memory to give your workers the lightning-fast application performance they expect. The latest in WiFi and Bluetooth technology provides your workers with the fastest and most dependable wireless device and peripheral connections, maximizing availability — and value. Comprehensive data capture options let you capture it all — barcodes, direct part marks, entire forms and more. And when it comes to Android, the TC8300 simplifies every aspect of deploying Android in your warehouse — including migration and security as well as control over updates and Google Mobile Services.



Get the Ultimate Android Platform

Android for instant familiarity

You get all the benefits of the latest version of Android, and your workers get a device they already know how to use — virtually eliminating training time and adoption curves.

Maximum power for maximum application performance

Get all the power you need to ensure superior performance on all your voice and data apps with the ultra-powerful 8-core processor, plus up to eight times the RAM and 32 times the Flash memory of the prior generation TC8000.

Instantly migrate your TE apps to Android, right out of the box

With the TC8300, your users can simply use your existing TE apps — no backend modification or user training required. When you're ready, you can easily turn your 'green screens' into Android touch-centric intuitive screens that boost productivity with All-touch Terminal Emulation (TE) — no coding required.

Longer WiFi range and speed — with less power

2x2 Multiple-User Multiple Input Multiple Output (MU-MIMO) technology allows access points to communicate with multiple devices simultaneously via pinpoint beamforming, boosting WiFi network capacity, speed and range. And processing is shifted from the mobile device to the access point, extending battery cycle time.

Bluetooth 5.0 — twice the speed, four times the range, less power

Get better performance from your Bluetooth printers, headsets and more, while using less power for longer battery cycle times.

Triple-shift battery power and unsurpassed battery management

With the most battery power in this class, the TC8300 can run for three consecutive shifts without a battery change.¹ And extensive battery metrics that make it easy to spot and retire aging batteries that can no longer hold a full charge.

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.



Provide the Ultimate User Experience

Superior ergonomics for superior productivity and comfort

The innovative scan angle eliminates the constant tilting that traditional designs require to view the screen and enter data, increasing productivity by 14% through a 55% reduction in wrist motion and a 15% reduction in muscle effort.

Flawless capture of every barcode

Give your workers first-time every-time capture of virtually any barcode in any condition with our advanced scan engines. And with five options, there is a scan engine that is perfect for your apps. The SE4850 Extended Range Imager allows you to scan 1D and 2D barcodes over an unmatched range — from 3 in./7.62 cm to 70 ft./21.4 m away — up to 60% closer and 35% farther than the competition. The industry-leading field of view enables the capture of wide 4 in./10.16 cm wide barcodes as close as 7 in./17.78 cm — nearly one third of the distance of competitive devices. Our SE4770 and SE4750 MR imagers are ideal for standard and mid-range scanning. The SE4750 DPM enables dependable lightning-fast capture of virtually every direct part mark.

The ultimate rugged design for the ultimate dependable operation

The TC8300 is built for day-in day-out operation in even the most challenging warehouse environments. With our most extreme impact ratings, the TC8300 continues to run, even after 2,000 consecutive tumbles and multiple 8 ft./2.4 m drops to concrete. This dustproof device can also handle jetting water, refrigerated storage areas and constant temperature swings between extreme heat and subzero cold — ideal in outside yards. And Corning Gorilla Glass brings maximum scratch-and-impact resistance to two of the most vulnerable device components — the touchpanel and scanner exit window.

Industry-first hands-free proximity scanning with a handheld device

The proximity sensor automatically triggers scanning, whether the TC8300 is worn on the hip or shoulder strap or placed in a cart or on a desktop. Two modes are available — close-up scanning from near contact to 6 in./15 cm and from contact to 1.96 ft./60 cm.

Advanced touchscreen technology for flexible data input

Give your workers the best touchscreen experience. The 4 in. display offers plenty of space for graphics-intensive intuitive applications. Users can interact with applications with a finger — even with a glove — or a stylus.

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.

Ultra high-resolution photos, videos and more

With the new optional 13 MP color rear camera, workers can capture detailed photos and videos to document proof of condition, proof of compliance and more.

Drive workforce productivity and device value to a new level with powerful new Mobility DNA apps — only from Zebra

WorryFree WiFi — dependably superior WiFi, delivered

Provide every worker with the best possible WiFi connection, every minute of every shift. This complimentary Mobility DNA tool delivers near instant application response times, unmatched roaming performance, plus exceptional voice quality and network diagnostics — everything you need to leverage your WiFi network to increase workforce productivity and better serve customers.

PowerPrecision Console — prevent aging batteries from reducing workforce productivity

This no-cost PC-based Mobility DNA solution provides an easy-to-read dashboard that allows you to quickly identify and remove aging batteries from your battery pool — before they impact workforce productivity and your operations.

End-to-end revolutionary control of the update process

Updating your enterprise-class Android mobile devices is often time-consuming, costly, complex and difficult to track. Now you can do it all with LifeGuard Analytics — free with your Zebra OneCare Support contract. View available updates, the update priority level and which devices are eligible for the update. Automatically update your devices over the air with the press of a button. And easily monitor and manage the status of updates in real time.

Easily manage access to Google Mobile Services (GMS)

StageNow's new Restricted Mode delivers an industry first — an easy way to simply click to deactivate Google Mobile Services (GMS) that come standard with the operating system — and reactivate should you need them down the road. StageNow, a Mobility DNA solution, is complimentary and pre-loaded on every TC8300.



Specifications

Markets and Applications

Transportation and 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

Warehouse

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

Physical Characteristics

Dimensions	9.17 in. L x 2.99 in. W x 2.52 in. D 233 mm L x 76 mm W x 64 mm D
Weight	Base: 17.2 oz./490 g; Package 1: 17.6 oz./500 g
Display	800 x 480 pixels; 4.0 in. diagonal; transfective LCD display; 16.7 Million (24-bit) color support; 400 NITS
Touch Panel	Multi-touch projected capacitive; fingertip (bare or gloved) input; conductive stylus supported (sold separately); Corning® Gorilla® Glass
Power	PowerPrecision+ Lithium ion 7000 mAh with hot swap battery backup
Notifications	Audible tone, multi-color LEDs, vibration
Keypad	On-screen keypad
Voice and Audio	Dual speakers, Bluetooth wireless headset support

Performance Characteristics

CPU	Qualcomm Snapdragon™ 660 octa-core 2.2 GHz
Operating System	Upgradeable to Android 14
Memory	Base, Condensation Resistant, DPM and Package 1 models: 4 GB RAM/32 GB Flash pSLC
Storage	SDXC compliant micro SD card slot
App Development	EMDK available through Zebra Support Central Web site

User Environment

Operating Temp.	-4° F to 122° F/-20° C to 50° C
Storage Temp.	-40° F to 158° F/-40° C to 70° C
Humidity	5% - 95% non condensing (condensing resistant optional)
Drop Spec.	Multiple 8 ft./2.4 m drop to concrete at room temperature per MIL-STD 810G ; multiple 6 ft./1.8 m drop to concrete across full operating temperature range
Tumble Spec.	2,000 3.3 ft./1 m tumbles
Sealing	IP65
Vibration	4 g's PK Sine (5 Hz to 2 kHz); 0.04 g 2/Hz Random (20 Hz to 2 kHz)
Thermal Shock	-40° F to 158° F/-40° C to 70° C rapid transition
Scanner Window	Corning® Gorilla® Glass
Electrostatic Discharge (ESD)	±20kVdc air discharge; ±10kVdc direct discharge; ±10kVdc indirect discharge

Zebra Interactive Sensor Technology

Light Sensor	Automatically adjusts display backlight
Motion Sensor	3-axis accelerometer, 3-axis gyroscope
Proximity	Sensor for automatic hands-free scanning; magnetic sensor to detect insertion in a cart mount or holster

Wireless LAN

Radio	IEEE 802.11a/b/g/n/ac/d/h/i/r/k/w; 2x2 MU-MIMO
Data Rates	5GHz: 802.11a/n/ac — up to 866.7 Mbps 2.4GHz: 802.11b/g/n — up to 300 Mbps
Operating Channels	Chan 36 - 165 (5180 - 5825 MHz); Chan 1 - 13 (2412 - 2472 MHz); Actual operating channels/frequencies depend on regulatory rules and certification agency
Security and Encryption	WEP, WPA - TKIP, WPA2- TKIP, WPA2-TKIP AES EAP TTLS, PAP, MSCHAP, MSCHAP v2, PEAPv0-MSCHAPv2, PEAPv1 - EAP-GTC, EAP-TLS, EAP-FAST, LEAP, FIPS 140-2 Level 1: Data in Motion and Data at Rest
Multimedia	Wi-Fi Multimedia™ (WMM)
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, OKC, 802.11r
Network Connections	Bluetooth; USB 2.0 OTG Host docking interface; 802.11r and 802.11k for enterprise voice roaming included

Wireless PAN

Bluetooth	Class 2, Bluetooth v5.0, Bluetooth Low Energy (BLE)
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Device Approvals and Compliance

TAA (optional on select configurations)	Trade Agreement Act optional on select configurations Compliant, FIPS 140-2 (DIM & DAR) support; FIPS 140-2 Level 1: Data in Motion and Data at Rest
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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
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Warranty

Subject to the terms of Zebra's hardware warranty statement, the TC8300 is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For complete warranty statement, go to: http://www.zebra.com/warranty



Data Capture

Scanning Options	SE4750: 1D/2D medium range omnidirectional imager SE4770: 1D/2D standard range omnidirectional imager SE4750 DPM: Direct Part Mark (DPM) imager SE4850: 1D/2D extended range imager
Camera	13 MP rear facing autofocus, f/2.4 aperture (optional)
NFC	Tap to Pair, ISO 14443 Type A and B, Felica and ISO 15693 cards, P2P mode and Card Emulation via Host (HCE) support (optional)

Recommended Services

Zebra OneCare Essential and Select: Maximize Zebra device availability, device value and operational efficiency with these fully-featured support services that set the industry bar for support. Zebra Visibility Services — Asset Visibility Services (AVS) and Operational Visibility Service (OVS): Options on any Zebra OneCare support contract, these services deliver the device management data needed to take device uptime, operational efficiency and return on investment to the next level.

Footnotes

1. Based on typical user profile

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. Mobility DNA is available on Android only. Features may vary by model and a Support Contract may be required. For more information on these Zebra-only features and for the most recent list of supported apps, please visit: <https://developer.zebra.com/mobilitydna>

