

TC52x and TC57x Series Touch Computer

The ultimate rugged touch computer — with a more advanced platform

When you choose the Zebra TC52x/TC57x, you get our best-selling TC52/TC57 rugged handheld mobile computer — and more. More advanced Zebra-only features that put the user experience in a class of its own to boost ease-of-use and productivity to new heights. More support for the latest mobile innovations, paving the way for new applications such as payment solutions that deliver more value — and superior future proofing. More Mobility DNA tools that make device management, device integration, application development and the user interface easier than ever. All in the first device in its class to offer the power of Android 10 — with up to 8 years of security updates to protect your device every day it is in service.



A user experience in a class of its own

All the power of Android 10

The best version yet, Android 10 is packed with new features that let workers do business faster, easier and more securely. Instant familiarity with Android virtually eliminates training time and adoption curves. And you can give workers the time-saving intuitive apps they expect.

Maximum application performance

Instantly navigate through application screens, thanks to the faster 2.45 GHz processor and new Universal Flash Storage (UFS).

Advanced higher-resolution touchscreen technology with Full HD

Full HD utilizes the entire 5 inch display, providing more room to view more information. The easy, familiar and flexible multi-touch operation works even when wet, with a gloved finger or a stylus. And the best-in-class outdoor readability screen is easy to read, even in bright sunlight.

An advanced scan engine for the fastest, easiest data capture Easily capture 1D and 2D barcodes, labels and documents with the new SE4720 scanner. You get lightning fast barcode capture, maximum motion tolerance — workers can capture barcodes as fast as they can press the scan button; the ability to capture even poor quality, damaged and dirty barcodes. A larger 'sweet spot' makes scanning even easier with point-and-shoot simplicity — and enables the close-up capture of large barcodes. And a wide working range beyond 24 in./60 cm supports more applications.

Full shift power your workers can count on

The PowerPrecision+ high capacity battery delivers an impressive 14 hours of power¹ — plenty for the longest shift. With a two-minute Warm Swap mode, swapping batteries is fast and easy — there's no need to turn off the device or close active apps. And with fast charging, batteries are fully charged and ready to go in record time.

Easily find misplaced devices

An integrated Bluetooth beacon and support for Device Tracker allows users to quickly and easily locate misplaced or missing devices.



The TC52x/TC57x — packed with innovative new features that take productivity and ease of use to the next level For more information, visit www.zebra.com/tc52x-tc57x

Shave steps and time out of tasks with rich locationing support

Enable locationing applications that improve the shopper experience and workforce efficiency — and increase sales — with support for Bluetooth 5.0 BLE and WiFi, as well as Zebra's SmartLens and MotionWorks solutions.

Maximize productivity with enterprise accessories

Backwards compatibility with all TC52/TC57 accessories allows you to cost-effectively upgrade to the latest technology. And new accessories help make life even easier for your workers. A new single-slot cradle with Ethernet and USB charges a device and battery — and enables easy device staging and updating. The ShareCradle Workstation provides a new level of flexibility, allowing you to connect a monitor, keyboard, mouse and more to the TC52x/TC57x, creating a workstation on the fly. A new electrical trigger in the attachable gun-style handle enables rapid-fire scanning. And a new stylus works in the rain, snow and more.

All the latest technology advancements

Rugged and ready for the toughest business day

The TC52x/TC57x may look like smartphones, but they are engineered for the enterprise. Drop it in water or on concrete, use it in the rain, snow or dusty areas. Sealing now includes the battery, increasing reliability. The unibody design provides extra impact protection for the sensitive electronics. And Corning[®] Gorilla[®] Glass provides maximum scratchresistance and shatter-proofing for the touch panel and imager window.

Support for leading-edge technology solutions

Support is built-in for the upcoming new generation of payment solutions. The NFC radio was relocated to the top of the device, paving the way for easier tap-to-pay solutions. And with support for Zebra's HD4000 headmounted display, you can drive cutting edge hands-free directed-action workflows that substantially improve productivity and task accuracy.

More 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.

The highest quality voice in its class

Three microphones, high-volume speakers and noise-cancellation technology work together to ensure that callers on both ends of every call can hear every word — even in the noisiest areas.

5 MP front-facing camera supports more advanced apps

Video calling improves service and productivity. Customers enjoy a more personal touch, while remote experts can assist with repair to help onsite technicians resolve issues faster and increase first-time-fix rates.

Complete cellular network flexibility with single device simplicity

The TC57x provides workers anywhere in the world with dependable cellular service. Support for carrier aggregation substantially improves application performance by increasing data capacity and speeds. And certification on leading public safety networks provides the connectivity first responders need when networks are overloaded in crisis situations.

Ultra high-resolution photos and videos

The 13 MP color rear camera captures detailed photos and videos for proof-of-condition/delivery/service, onsite support and more.

Bluetooth 5.0 - 2x speed, 4x the range, all with less power

Improved data speeds up to 2 Mbps increase application flexibility and performance for Bluetooth peripherals, such as printers and headsets, while Bluetooth Low Energy (BLE) reduces power requirements to extend battery cycle times.

Drive workforce productivity and device control to a new level with the powerful Mobility DNA[™] suite

So many tools, so much value

LifeGuard[™] for Android[™] provides security patches every day your devices are in service — up to eight years. Devices can be updated over the air with your supported Enterprise Mobility Management (EMM) system. Mobility Extensions (Mx) provides over a hundred features you can activate to improve the security, data capture support, wireless connectivity and device manageability of the standard Android operating system. Stage a handful or thousands of devices quickly and easily with StageNow — including deactivation of Google Mobile Services (GMS). Control the apps and device features your workers see with Enterprise Home Screen. Capture and send data right to your application, no coding needed, with DataWedge. WorryFree WiFi provides dependably superior WiFi. PowerPrecision Console and the PowerPrecision+ battery enable unsurpassed battery management. Add push to talk over WiFi or cellular. Turn the TC52x/TC57x into a PBX mobile phone. And more.

TC52x/TC57x Series Specifications

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Dimensions	6.1 in. L x 2.9 in. W x 0.73 in. H 155 mm L x 75.5 mm W x 18.6 mm H					
Weight	8.8 oz./249 g with battery					
Display	5.0 in. Full High Definition (1920 x 1080); exceptionally bright, outdoor viewable; optically bonded to touch panel					
Imager Window	Corning Gorilla Glass					
Touchpanel	Dual mode capacitive touch with stylus or bare or gloved fingertip input (conductive stylus sold separately); Corning Gorilla Glass; water droplet rejection; fingerprint resistant anti-smudge coating					
Backlight	LED backlight					
Power	Rechargeable Li-Ion, PowerPrecision+, ≥15.48 Watt hours, ≥ 4150 mAh, improved battery metrics for better battery management, fast charging (up to 2.4 A); Warm Swap battery mode up to two minutes (120 seconds)					
Expansion Slot	User accessible MicroSD supports up to 256 GB SDXC					
SIM Slots	TC57x only: 1 nano SIM; 1 eSIM					
Network Connections	TC52x/TC57x: WLAN, WPAN (Bluetooth), USB 2.0, High Speed (Host and Client) TC57x only: WWAN					
Notification	Audible tone; multi-color LEDs; vibration					
Keypad	On-screen keypad and enterprise keyboard					
Voice and Audio	Three microphones with noise cancellation; vibrate alert; front facing speaker; Bluetooth wireless headset support; high quality speaker phone; PTT headset support; cellular circuit switch voice; HD voice; Super-wideband (SWB) and Fullband (FB) audio; 3.5mm audio jack					
Buttons	Four programmable buttons for maximum flexibility: dual dedicated scan buttons, dedicated push-to-talk button and volume up/down buttons					
Performance Charac	teristics					
CPU	Qualcomm Snapdragon™ 660 octa-core, 2.45 GHz					
Operating System	Android 10, upgradeable through Android 11					
Memory	4GB RAM/32GB UFS Flash					
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% to 95% non-condensing					
Drop Specifications	Multiple 6 ft. drops to concrete with the rugged boot accessory per Mil STD 810 G; multiple 4 ft/1.2m drops to tile over concrete -10°C to 50°C (14°F to 122°F)					
Tumble Specification	500 1.6 ft./0.5 m tumbles, meets or exceeds IEC tumble specification					
Sealing	IP68 and IP65 with battery per applicable IEC sealing specifications					

sealing specifications

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User Environment	TC52x/TC57x Series vertical						
Vibration	tion 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	applications: Retail Associates					
Electrostatic Discharge (ESD)	+/- 15 kV air discharge; +/- 8 kV direct discharge; +/- 8 kV indirect discharge	Price/inventory checks					
Interactive Sensor	Technology (IST)	 Loyalty apps 					
Light Sensor	Automatically adjusts display backlight brightness	 Item locator 					
Magnetometer	netometer eCompass automatically detects direction and orientation						
Motion Sensor	3-axis Accelerometer with MEMS Gyro	 Assisted selling 					
Pressure Sensor	Automatically detects altitude information for locating (TC57x only)						
Proximity Sensor	Automatically detects when the user places the handset against head during a phone call to disable display output and touch input	 Gift registry look Retail Managers Workforce 					
Data Capture		 workforce management 					
Scanning	SE4720 1D/2D Imager	 Planogram 					
Camera	Front — 5 MP Rear — 13 MP autofocus; flash LED generates balanced white light; supports Torch mode	management Promotion compliance 					
NFC		 Merchandising 					
NFC	ISO 14443 Type A and B; FeliCa and ISO 15693 cards; P2P mode and Card Emulation via Host. Card Emulation via Host and UICC	Direct Store Delivery Drivers					
Wireless WAN, Data	a and Voice Communications (TC57x Only)	 Order automatic 					
Radio Frequency	Supports VoLTE , Carrier Aggregation up to 3DL CA	 Delivery tracking 					
Band	AT&T FirstNet Ready certification Verizon PNTM certification	 Inventory management 					
	LTE FDD: 700/800/850/900/1800/1900/	 Customer support 					
	AWS/2100/2600 (28,13,14,12,17/19,20/5,26/8/3/2, 25/4,66/1/7);	Field Service Technicians					
	LTE TDD: 1900/2300/2500 (39/40/41,38);	 Asset managem 					
	UMTS/HSPA/HSPA+: 850/900/AWS/1900/2100 (5/8/4/2/1);	 Parts inventory 					
	GSM/GPRS/EDGE: 850/900/1800/1900	Invoicing					
GPS	TC57x only: Autonomous, Concurrent GPS; GL0NASS; Gallileo; BeiDou, and A-GPS. Supports IZAT ^{**} XTRA	 Scheduling and location-based services 					
Multimedia	Wi-Fi Multimedia [™] (WMM) and WMM-PS; Including TSPEC	Parcel/Light Courier Drivers					
Wireless LAN		Proof of delivery					
		Asset managem					
Radio	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w; Wi-Fi [™] certified; IPv4, IPv6, 5GHz 2x2 MU-MIMO	Location service					
Data Rates	5GHz: 802.11a/n/ac — up to 866.7 Mbps	 Invoicing Government/ 					
	2.4GHz: 802.11b/g/n — up to 300 Mbps	Public Safety					
Operating Channels	Channel 1-13 (2412-2472 MHz): 1,2,3,4,5,6,7,8,9,10,11,12,13	eCitation Public transport:					
	Channel 36-165 (5180-5825 MHz): 36,40,44,48,52 56,60,64,100,104,108,112,116,120,124,128,132,136,1	Public transporta ticketing Situational					
	40,144,149,153,157,161,165 Channel Bandwidth: 20, 40, 80 MHz	 Situational awareness 					
	Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency.	 Communication and collaboratio 					
		 Asset managem 					

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TC52x/TC57x **Series vertical** markets and applications:

- **Retail Associates**
- Price/inventory checks
- Loyalty apps
- Item locator
- Price management
- Line busting/POS
- Assisted selling
- Electronic coupons
- Store transfers
- Gift registry lookup

Retail Managers

- Workforce management
- Planogram management
- Promotion compliance
- Merchandising

Direct Store **Delivery Drivers**

- Order automation
- Delivery tracking
- Inventory management
- Customer support

Field Service Technicians

- Asset management
- Invoicing Scheduling and
- location-based services

Parcel/Light **Courier Drivers**

- · Proof of delivery
- Asset management
- Location services
- Invoicing

Government/

Public Safety eCitation

- Public transportation ticketing
- Situational awareness
- Communication and collaboration
- Asset management

TC52x/TC57x Specifications (continued)

Wireless LAN (Continued)						
Security and Encryption	WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP and AES) – EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC and LEAP. EAP-PWD					
Certifications	WFA (802.11n, WMM-PS, 801.11ac, PMF)					
Fast Roam	PMKID caching; Cisco CCKM; 802.11r; OKC					
Wireless PAN						
Bluetooth	Class 2, Bluetooth v5.0, Bluetooth Low Energy (BLE)					

Warranty

Subject to the terms of Zebra's hardware warranty statement, the TC52x/57x Series 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: www.zebra.com/warranty

Recommended Services

Zebra OneCare™ Essential and Select support services

Zebra Visibility Services – VisibilityIQ™ Foresight

Footnotes

1. Based on typical user profiles.

 Upgrading to new supported versions of Android requires the purchase of a Zebra OneCare Service contract.
 Specifications subject to change without notice.

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	DataV	Nedge	Device Tracker		d and		rprise wser	Enterprise Keyboard	Enterprise Home Screen	LifeGuard	Mx Mobility Extensions
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PowerPrecis	ion+ P	owerPr Cons	ole	Multi- Barcode Scanning	Stagel	Now	Swipe Assist	PTT Express	Workforce Connect PTT Pro	Workforce Connect Voice	WorryFree WiFi



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