TC70 Series Rugged Touch Computer

YOUR FRONT LINE TO A SMARTER ENTERPRISE

Your employees need enterprise class handheld computers to communicate and access information seamlessly in order to work more efficiently and better serve your customers — yet they want a device that is every bit as refined and easy-to-use as their own consumer devices. Now, you can give them both with the TC70 Series. With flexible OS support, you can choose between two of the most advanced and intuitive mobile operating systems — Android™ and Windows 10 IoT Mobile Enterprise — both fortified for use in the enterprise. The rugged design holds up even in the most demanding environments and the TC70 Series can double as a voice communications device. You can automate the capture of just about any type of business intelligence with the embedded scanner and camera. And the full complement of accessories and cutting edge technology will serve your business for years to come, for an unsurpassed return on investment. Better serve your customers in retail, manufacturing, and operations with the TC70 Series. Real competitive advantage — delivered.

Enterprise-class Android — with Multiple Configurations to Meet Your Needs

With the TC70 Series, you can leverage the power of Android, while choosing the configuration that best fits your technology and business needs. Every Android TC70 Series ships with Mobility Extensions (Mx), a series of features that make Android a more robust enterprise-class operating system. Mx minimizes IT support time and maximizes worker productivity and device uptime by providing better control of your mobile devices, application access and Wi-Fi performance and security. Standard Configuration TC70 and TC70x Android devices come with Google Mobile Services (GMS) which provides integrated Google applications such as Gmail and Google Maps. Professional Configuration TC70 and TC70x Android devices ship without GMS, removing GMS applications and services. Both configurations are based on Android Open Source (AOSP) and ship with respective Android Enterprise functionality.

Microsoft Windows for the Enterprise

The TC70x is also available with Windows 10 IoT Mobile Enterprise, which brings Microsoft’s enterprise-grade security, manageability and connectivity to a natural user interface that’s easy to use. You get numerous productivity-enhancing features such as multiple user profiles, out of the box support for barcode scanning and other peripherals, as well as native support for popular enterprise tools like Skype for Business and MS Office. And, with Continuum and Miracast wireless display support, Windows 10 IoT Mobile Enterprise delivers PC-like productivity — Office apps scale up beautifully to a larger screen.

World-Class Data Capture

Give your employees the tools they need to work faster and smarter. The integrated enterprise-class imager offers Zebra’s proprietary PRZM Intelligent Imaging technology, a megapixel sensor and advanced optics, which work together to deliver data capture performance in a class of its own. Workers can capture 1D and 2D barcodes in virtually any condition, at lightning speed. The rear-facing camera enables the easy capture of high-resolution photos, signatures, videos and more, allowing you to capture more types of business intelligence to streamline more business processes. The front camera allows workers to place a video call to get the help they need — and provide customers with that personal touch. Near Field Communications offers simple Tap and Pair device pairing with compatible printers, and automates identity verification at facility entry points. *Identity verification supported on Android only.
Maximum Data Entry Flexibility with an Industry Leading Dual Mode Touch Panel
Let your users choose their preferred data input pair: finger and gloved finger or finger and stylus — ideal for crisp signature capture. The intelligent display automatically adjusts as needed, unlike competitive devices that require setting adjustments every time the user switches data input method. And the large 4.7 in. display takes the capacitive touch experience to the next level — it works even if it’s wet. Glove support and dual mode touch panel are available on Android only.

Comprehensive Audio Functionality for a New Level of Voice Flexibility
With up to four times the loudness of popular smartphones and noise cancelling technology, the TC70 Series provides crystal clear audio on both ends of every call. Android models support Workforce Connect Push-to-Talk Express to give workers walkie-talkie style voice communications right out of the box. Windows 10 IoT Mobile Enterprise offers integrated support for Skype for Business. The result? A highly collaborative workforce that can respond instantly to customer needs. Skype for Business Voice requires Zebra WLAN infrastructure for optimal performance.

Mobility DNA
Every strand of your Android mobility platform is simpler with Zebra’s Mobility DNA. That’s because, from the start, you have the industry’s most comprehensive suite of mobility must-haves to accelerate your solution. More off-the-shelf end-user apps, more robust administration utilities and easier app development. Purpose built for the enterprise, Mobility DNA makes ease, confidence and value intrinsic to your investment and our full line of Android mobile computers.

Rugged and Ready for All-day Every Day Enterprise Use
The TC70 Series is ready for the demands of everyday life in the business world, tested and proven to operate reliably after multiple 6 ft./1.8 m drops to concrete and 2,000 consecutive 3.2 ft./1 m tumbles in our punishing tumble test. With IP65 and IP67 sealing, you get a device that is dust-tight and can survive complete immersion in water, making it ideal for use in the retail backroom, warehouse floor, in outdoor shopping areas or outside on a receiving dock. The Corning Gorilla Glass touch panel and scanner exit window bring a new level of durability to two of the most vulnerable components.

PowerPrecision+ Battery for Best-In-Class Power and Manageability
Your workers depend on their mobile devices nearly every minute of the workday. This user replaceable battery ensures that workers have plenty of power for the longest shift and devices are always available. A wealth of easily accessible battery metrics make it easier than ever to identify, remove and replace aging batteries. And with Warm Swap mode, it lets users change the battery without having to power down the device or close open apps.

A Robust Accessory Family to Meet Any Enterprise Need
The comprehensive family of accessories includes a snap-on magnetic stripe reader for mobile payment, a Bluetooth mobile payment device for magnetic stripe and Chip and PIN, a holster, a hand strap, a snap-on trigger handle and more, allowing you to easily meet the needs of many different types of users performing many different types of tasks. And multi-slot battery chargers and the unique ShareCradle — a multi-slot cradle that can accommodate the TC70 Series and future Zebra devices — make backroom management easy and cost effective.

THE TC70 SERIES — THE PROFESSIONAL GRADE DEVICE FOR THE ENTERPRISE.
For more information, visit www.zebra.com/tc70series or access our global contact directory at www.zebra.com/contact

Boost efficiency and customer service with the TC70 Series in:
Retail
• Associates:
  ▫ Price checks
  ▫ Inventory checks
  ▫ Item locator
  ▫ Price changes/price audits
  ▫ Line busting
  ▫ Assisted selling
  ▫ Product comparison
  ▫ Electronic coupons (mobile phone displays)
  ▫ Market research
  ▫ Store inventory transfers
  ▫ Gift registry lookup
  ▫ Financial/loyalty applications
  ▫ Click and mortar/catalogue orders
  ▫ Training
• Mobile payment
• Inventory management
• Voice communications
• Managers:
  ▫ Workforce management
  ▫ Planogram management
  ▫ Promotion compliance
  ▫ Merchandising
Manufacturing
• Asset management
• Building maintenance
• Supervisor/manager tasks:
  ▫ Workforce management
  ▫ Supplier management
  ▫ Management of customer data
  ▫ Management of product information
TC70 Series Specifications

PHYSICAL CHARACTERISTICS

Dimensions
6.3 in. L x 3.3 in. W x 1.1 in. D
161 mm L x 84 mm W x 28 mm D

Weight
13.3 oz./376 g

Display
4.7 in. High Definition (1280 x 720); exceptionally bright, outdoor viewable; optically bonded to touch panel

Imager Window
Corning Gorilla Glass

Touch Panel
Dual mode capacitive touch with stylus, finger or gloved fingertip input (conductive stylus sold separately); Corning Gorilla Glass

Backlight
LED backlight

Power
Li-Ion 3.7 V, 4620 mAh. PowerPrecision/PowerPrecision+: Improved battery technology for longer cycle times and real-time visibility into battery metrics for better battery management.

Expansion Slot
TC70: User accessible MicroSD with 32GB SDHC and up to 64GB SDXC
TC70x: User accessible MicroSD with 32GB SDHC and up to 128GB SDXC

Network Connections
WWAN, WLAN, WPAN (Bluetooth)

Notification
Audible tone; multi-color LEDs; vibration

Keypad
On-screen keypad; Enterprise Keyboard

Voice and Audio
Three microphone support with noise cancellation; vibrate alert; speaker; Bluetooth wireless headset support

PERFORMANCE CHARACTERISTICS

CPU
TC70: 1.7 GHz dual core processor
TC70x: 1.8 GHz hexa-core 64 bit processor
TC70x Windows 10 IoT Mobile Enterprise: 1.8 GHz hexa-core 64 bit processor (Snapdragon 650)

Operating System
TC70: Android 5 Lollipop
TC70x: Android 7 (Nougat) or Windows 10 IoT Mobile Enterprise

Memory
TC70: 16 GB RAM / 8 GB Flash pSLC
TC70x: 2 GB RAM / 16 GB Flash pSLC or 4 GB RAM / 32 GB Flash pSLC

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 85% non-condensing

Drop Specification
Multiple 6 ft./1.8 m drop to concrete across full operating temperature range, multiple 8 ft./2.4 m drop to concrete at room temperature per MIL-STD 810G

Tumble Specification
2,000 3.2 ft./1.0 m tumbles; meets and exceeds IEC tumble specifications

Sealing
IP65 and IP67 per applicable IEC sealing specifications

Vibration
4 g’s PK Sine (5 Hz to 2 kHz), 0.04g/Hz Random (20 Hz to 2 kHz), 60 minute duration per axis, 3 axis

USER ENVIRONMENT (CONTINUED)

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

AUDIO
High quality speaker phone with up to 108 dB SPL volume; wireless (Bluetooth) headset support; PTT headset support; handset/speakerphone modes

INTERACTIVE SENSOR TECHNOLOGY (IST)

Light Sensor
Automatically adjusts display backlight brightness

Motion Sensor
3-axis accelerometer for dynamic screen orientation

DATA CAPTURE

Scanning
SE4750 imager (1D and 2D); extraordinary range: Scan range – Code 39 barcode: 20 Mil: 1.6 in to 36.3 in/4.1 cm to 92.2 cm 3 Mil: 2.8 in to 6.2 in/71 cm to 15.8 cm

Camera
TC70: Front-1.3 MP fixed focus Rear - 8 MP autofocus
TC70x (Android): Front-1.3 MP fixed focus Rear - 13 MP autofocus
TC70x (Win10): Front-1.3 MP fixed focus Rear - 8 MP autofocus

FNC
ISO 14443 Type A and B, FeliCa, and ISO 15693 cards. P2P mode and Card Emulation via UICC and Host

WIRELESS LAN

Radio
TC70: IEEE 802.11a/b/g/n/d/h/i/k/r
TC70x Android: IEEE 802.11a/b/g/n/ac/d/h/i/k/r
TC70x Windows 10 IoT Mobile Enterprise: IEEE 802.11a/b/g/n/ac/d/h/i/w

Data Rates
TC70
5GHz: 802.11a/n — up to 150 Mbps;
2.4GHz: 802.11b/g/n — up to 72.2 Mbps

TC70x Android
5GHz: 802.11a/n/ac — up to 866.7 Mbps;
2.4GHz: 802.11b/g/n — up to 144.4 Mbps

TC70x Windows 10 IoT Mobile Enterprise
5GHz: 802.11a/n/ac — up to 866.7 Mbps;
2.4GHz: 802.11b/g/n — up to 300 Mbps

Operating Channels
TC70: Chan 1 - 13 (2412 - 2472 MHz), Chan 36 - 165 (5180 - 5825 MHz); Channel Bandwidth: 20, 40 MHz
TC70x: Chan 1 - 13 (2412 - 2472 MHz), Chan 36 - 165 (5180 - 5825 MHz); Channel Bandwidth: 20, 40, 80 MHz

Actual operating channels/ frequencies depend on regulatory rules and certification agency

Security and Encryption
TC70: WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP, and AES) — EAP-TLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, EAP Fast and LEAP
TC70x Android: WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP, and AES) — EAP-TLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, EAP Fast and LEAP
TC70x Windows 10 IoT Mobile Enterprise: WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP, and AES) — EAP-TLS (MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, FIPS DIM

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TC70 Series Specifications (continued)

**WIRELESS LAN (CONTINUED)**

**Multimedia**
- TC70/TC70x Android: Wi-Fi Multimedia™ (WMM) and WMM-PS
- TC70x Windows 10 IoT Mobile Enterprise: WMM

**Certifications**
- TC70: WFA (802.11n, WMM, WMM-PS, Wi-Fi Direct, Miracast, Soft-AP, WPS 2.0) and Cisco CCXv4
- TC70x Android: (802.11n, 802.11ac, WMM-PS, WMM-AC, Voice Enterprise, Miracast)
- TC70x Windows 10 IoT Mobile Enterprise: WFA (802.11n, 802.11ac, PMF, WMM)

**Fast Roam**
- TC70/TC70X Android: PMKID caching, Opportunistic Key Caching (OKC), Cisco CCKM and FT (802.11r)
- TC70x Windows 10 IoT Mobile Enterprise: PMKID caching, Opportunistic Key Caching (OKC)

**WIRELESS PAN**

**Bluetooth**
- Class 2, Bluetooth v4.0 (Bluetooth® Smart technology)
- BT Wideband support HFP v1.6
- Bluetooth v4.1LE (TC70x only)

**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 TC70 Series to function as a full featured mobile telephone with multi line capability across Wi-Fi networks.

1. Magnetic Stripe Reader not supported on TC70x Windows 10 Mobile Enterprise.
2. TC70x Windows 10 IoT Mobile Enterprise supports finger/stylus input only.
3. PowerPrecision+ batteries are available only on TC70x Android models and provide advanced state of health and advanced state of charge metrics.
4. PTT not supported on TC70x Windows 10 Mobile Enterprise.
5. Please refer to the TC70 Series User Guide or Integrator Guide for full data capture specifications.
6. ISO 14443 Type FeliCa supported on TC70x models only.
7. Workforce Connect supported on Android only.

Specifications subject to change without notice and some features may vary by model.

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**ADDITIONAL MOBILITY DNA SOLUTIONS**

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

- Enterprise Keyboard
- Enterprise Home Screen
- Stage Now
- AppGallery
- EMDK
- Enterprise Browser
- SimulScan
- Mobility Extensions

Mobility DNA is available on Android only and supported features may vary by model.

**WARRANTY**

Subject to the terms of Zebra’s hardware warranty statement, the TC70 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: http://www.zebra.com/warranty

**RECOMMENDED SERVICES**

Zebra OneCare; Managed Device Service