

EC50/EC55 Enterprise Mobile Computer

A new category of individually assigned enterprise mobile computers

Introducing the thinnest, lightest Zebra mobile computer yet — the EC50 WiFi and EC55 WiFi/cellular enterprise mobile computers. Designed to be individually assigned, these devices are always at your workers' fingertips, ready to work whether your workers are inside your facility or out in the field. You get the best of all worlds — the great smartphone look and feel workers want in their business device, the durability for all-day everyday business, plus all the business features your workers need to drive personal productivity, collaboration and device value to a new high. Mobility DNA tools take ease-of-use, device security and device manageability to a new level. It's ready for the future with support for payment options and RFID. You get extreme flexibility — in just seconds, the same device that slips into a pocket can turn into a full workstation, a gun-style device that brings extreme comfort to scan intensive tasks, and a two-way radio or a PBX handset for better collaboration via voice and text. The ability to purchase these devices for four years eliminates the complexities of managing different models with different platforms. And the optional gold standard in support is available to keep your devices up, running and in the hands of your workers. The EC50/EC55 — the individually assigned smartphone-style enterprise mobile computer that's all business.



A game changing increase in individual productivity

Get real pocket-power with true smartphone-style ergonomics

With its sleek smartphone styling, the EC50/EC55 easily fits in a pocket or a wearable accessory. It's always available, ready to provide workers with whatever they need to get the job done.

Application performance that never keeps you waiting

Get wired-style voice and data application performance with the ultra-powerful advanced SD660 octa-core processor.

Android for instant familiarity — and virtually no learning curve

Android 10 delivers 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.

Do more with more wireless connections

Stay connected with unmatched, fast and dependable 'wired-quality' WiFi connections that deliver near instant application response times with Zebra's Fusion, 2x2 MU-MIMO support and WorryFree WiFi. Get better Bluetooth peripheral performance with Bluetooth 5.0, which offers twice the speed and four times the range, all with less power. And with integrated Bluetooth and NFC, just tap to read ID cards; pair a printer, and in the near future, complete a purchase.

Power every minute of every workday

The standard battery provides 10 hours of power. For longer shifts, an optional extended battery provides 13 hours of power.

Better productivity with a large 5 in. HD screen

The large screen provides plenty of space for information, while multi-touch support allows workers to intuitively interact with applications.

Enterprise-class data capture

The optional built-in scanner enables the capture of virtually any barcode in any condition, including Digimarc. And the 13 MP color rear camera makes it easy to capture detailed photos and videos to document proof of condition, proof of return and more.

Boost individual productivity with the EC50 and EC55 — the individually assigned enterprise mobile computers that are all business.

For more information, visit www.zebra.com/ec50-ec55

Real business durability

The ‘work-worthy’ design is virtually waterproof, drop-proof and dust-proof. Corning Gorilla® Glass® brings maximum scratch-and-impact resistance to two of the most vulnerable device components — the touchpanel and scanner exit window. And the optional protective case provides additional protection if the device is dropped.

Better connect your teams with ready-to-use voice solutions

With Workforce Connect PTT Express, your workers are always just the press of a button away, able to place and receive crystal clear PTT calls over your WiFi network — no extra infrastructure to purchase. Do you want to connect workers indoors and outside? Just activate a PTT Pro subscription and your workers will be up and running in as little as a day. Want your EC50/EC55 devices to double as PBX handsets? With Workforce Connect Voice, you can easily create a custom interface that makes it easy to execute even the most complex telephony functions.

Accessorize for success

Just place the EC50/EC55 into the powerful workstation cradle to instantly transform the EC50/EC55 into a full workstation, complete with a monitor, keyboard, mouse and more. Or, keep it right at your fingertips with the holster or hand strap.

Enterprise-ready Mobility DNA — the most evolved and extensive suite of software improves practically every aspect of the EC50/EC55**Give your workers the easiest data capture experience**

With DataWedge, workers can capture barcodes, photos and NFC data and automatically send properly formatted information to any existing application — no coding required. Multi-Barcode Scanning allows workers to capture multiple barcodes on an item with a single press of the scan button — no need to cover up unwanted barcodes. Workers can put a virtual ‘soft’ scan button right on the display to make scanning even easier with Swipe Assist. And five optional soft keyboards are available to enable faster, easier data entry with Enterprise Keyboard.

Improve device and network security — quickly and easily

Turn Android into a business-class operating system with over 100 additional features that improve security and more with Mobility Extensions (Mx). Choose the features and applications your users can access on your devices with Enterprise Home Screen. Easily find lost and misplaced devices with Device Tracker, even if the device is powered down. LifeGuard™ for Android™¹ makes OS security updates easy — schedule and update your devices over the air via your supported EMM/MDM. And you can easily monitor the status of your OS updates on an easy-to-use dashboard.

Drive device management time and cost to a new low

With StageNow, you can prepare a handful or hundreds of devices for use with the right settings, configurations and applications, all with the simple scan of a barcode or tap on an NFC tag. With StageNow’s Restricted Mode, a simple click deactivates the Google Mobile Services (GMS) that come standard with Android, improving device privacy — and you can easily reactivate at any time. With PowerPrecision Console, aging batteries that can no longer hold a full charge are easy to spot and remove — before they cause expensive downtime. And Device Diagnostics tests all main systems to determine if a device can be repaired on site, eliminating a needless trip to the Zebra Repair Center.

Unmatched total benefit of ownership**Multi-year deployment and support**

While the EC50/EC55 looks like a smartphone, the similarities stop there. The purpose-built for work EC50/EC55 is guaranteed to be available for sale for four years, versus 18 months for the typical smartphone — eliminating the complexities and cost of managing different models with different platforms. And product support is available for a total of eight years — the four years the product is for sale and an additional four years post sale period.

The power of a common Android platform

The EC50/EC55 expands Zebra’s portfolio of enterprise-class Android mobile, vehicle and tablet computers — already considered one of the world’s largest. The shared portfolio platform — including the OS, APIs and Mobility DNA tools — simplifies device management, application portability and IT support, very unlike smartphones, with platforms that typically change with each model.

Industry-leading security support for Android

Zebra’s LifeGuard for Android provides fully-controllable security updates for up to eight years. You get access to timely updates to address new and emerging threats; a report that lists eligible devices, the severity of the threat and all the device details you need to create a well-organized update plan; over-the-air remote updating, visibility into update status and more.¹

Cut total cost of ownership (TCO) in half

The EC50/EC55 enterprise-class device may cost more up front than some consumer smartphones — but in the long run, simplified management, long lifecycles and tools that boost productivity can cut your TCO in half.²

Specifications

Physical Characteristics	
Dimensions	With standard battery: 6.08 in. L x 2.99 in. W x 0.38 in. D 154.5 mm L x 76.0 mm W x 9.6 mm D With extended battery: 6.08 in. L x 2.99 in. W x 0.46 in. D 154.5 mm L x 76.0 mm W x 11.8 mm D
Weight	6.1 oz./173 g to 6.46 oz./183 g (SKU dependent with standard battery)
Display	5 in.; HD (720x1280)
Imager Window	Corning® Gorilla® Glass
Touch Panel	Corning® Gorilla® Glass; capacitive touch panel; multi-touch
Backlight	450 NITS, LED
Power	Standard battery: 3060 mAh Extended battery: 4180 mAh Charge times: 0 to ~25% in ~15 minutes; 0 to ~90% in less than two hours
Expansion Slot	One 128 GB micro SD slot
SIM Slots	EC55 only: 1x Nano SIM, 1x e-SIM (optional)
Network Connections	WWAN; WiFi, Ethernet cradle
Notifications	Audible tone; multi-color LEDs; vibration
Keypad	On-screen keypad and enterprise keyboard
Voice and Audio	1 watt speaker, receiver, PTT, voice support, 3 digital microphones, USB Type-C headset support
Buttons	Programmable; scan on each side; volume up/down; power; push-to-talk (PTT) ³
Interface Ports	Bottom USB 2.0 OTG - host/client (Type-C), SKU dependent: 0, 2, or 8 pin rear connection
Performance Characteristics	
CPU	Qualcomm SD660, 2.2 GHz Octa-core
Operating System	Android 10; upgradeable through Android 11/R*; Zebra's Restricted Mode for control over GMS and other services (* Support for future Android OS releases past A11/R are subject to Qualcomm validation.)
Memory (RAM/Flash)	3 GB/32 GB; 4 GB/64 GB
User Environment	
Operating Temp.	14° F to 122° F/-10° C to +50° C
Storage Temp.	-40° F to 158° F/-40° C to +70° C
Humidity	5% to 95% non-condensing
Drop Specification	4 ft./1.2 m per MIL-STD-810G. With protective boot: 5 ft./1.5 m per MIL-STD-810G to concrete across operating temperature range
Tumble Specification	300 1.6 ft./0.5 meter tumbles at room temperature without protective boot 500 1.6 ft./0.5 meter tumbles at room temperature with protective boot
Sealing	IP67
User Environment	
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
Electrostatic Discharge (ESD)	+/-15 kV air discharge, +/-8 kV direct discharge; +/-8 kV indirect discharge

Interactive Sensor Technology (IST)	
Light Sensor	Automatically adjusts display backlight brightness
Magnetometer	EC55 only: e-Compass
Motion Sensor	3-axis gyroscope, 3-axis accelerometer
Proximity Sensor	Automatically disables touch panel and turns off display in Handset mode (voice calls)
Data Capture	
Scanning	SE4100; 1D/2D omnidirectional imager
Camera	Front — 5 MP fixed focus; f/2.0 aperture Rear — 13 MP autofocus; f/2.0 aperture; flash LED
NFC	Integrated; High RF output power; MIFARE, ISO 14443 A&B, FeliCa , ISO 15693 and NFC Forum supported cards
Wireless WAN, Data and Voice Communications	
WAN Radio Frequency Band (EC55 only)	LTE Category 11 EC55 Rest of World: LTE FDD: B1, B2, B3, B4, B5, B7, B8, B17, B19, B20, B28 LTE TDD: B38, B39, B40, B41 UMTS: B1, B2, B3, B4, B5, B8, B9, B19 GSM: 850, 900, 1800, 1900 EC55 North America: LTE FDD: B2, B4, B5, B7, B12, B13, B14, B17, B25, B26, B66 UMTS: B2, B4, B5 EC55 China: LTE FDD: B1, B3, B5, B7, B8 LTE TDD: B38, B39, B40, B41 UMTS: B1, B5, B8 GSM: 850, 900, 1800, 1900
GPS (EC55 only)	GPS with A-GPS: Glonass; BeiDou; Galileo
Wireless LAN	
Radio	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w/mc; Wi-Fi™ certified; IPv4, IPv6, 2x2 MU-MIMO; soft AP
Data Rates	5 GHz: 802.11a/n/ac — up to 866.7 Mbps 2.4 GHz: 802.11b/g/n — up to 300 Mbps
Operating Channels	Channel 1-13 (2412-2472 MHz); Channel 36-165 (5180-5825 MHz) Channel Bandwidth: 20, 40, 80 MHz 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); WPA/WPA2 Enterprise (TKIP and AES) — EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC and LEAP.EAP-PWD
Certifications	Wi-Fi™ certified
Fast Roam	PMKID caching; Cisco CCKM; 802.11r; OKC
Multimedia	Wi-Fi Multimedia™ (WMM) and WMM-PS
Wireless PAN	
Bluetooth	Class 2, Bluetooth v5.0, Bluetooth Low Energy (BLE); secondary Bluetooth BLE beacon for finding lost (powered off) devices

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Markets and Applications

- Retail**
- Information lookup
 - Assisted selling
 - Inventory and cycle counts
 - Put-away and replenishment
 - Price check/item lookup
 - Task assignment and management
 - Picking and collecting
 - Personal device
 - Shipping and receiving
 - Asset management
 - Mobile POS

- Hospitality**
- Concierge service
 - Luggage verification
 - Event verification
 - Reservation verification
 - Badge scan
 - Payment facilitation

- Healthcare Ancillary Services**
- Patient transportation
 - Meal delivery
 - Sanitation
 - Housekeeping

- Field Mobility**
- Courier/delivery
 - DSD
 - Employee ID Check
 - Field sales

Environmental Compliance

• RoHS Directive 2011/65/EU; Amendment 2015/863
• REACH SVHC 1907/2006
For a complete list of product and materials compliance,
please visit www.zebra.com/environment
Mobility DNA™ Professional Integrated Solutions

Warranty

Subject to the terms of Zebra's hardware warranty statement, the EC50/EC55 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>

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 VisibilityIQ™ Services: Improve device value with Zebra's optional VisibilityIQ Services. VisibilityIQ gives the data-driven, actionable insight to get the most from your devices, workers and daily tasks. VisibilityIQ Foresight aggregates big data onto a single, color-coded, cloud-based pane of glass, translating it into actionable insight to streamline workflow. VisibilityIQ DNA provides a view into key DNA tools, and VisibilityIQ OneCare cloud-based dashboard offers visibility into repairs, tech support, software security status and more.

Footnotes

1. LifeGuard for Android is included with every Zebra OneCare support agreement. Some features, such as Over-the-Air remote updates and update status reports are available through a supported EMM.
2. Total Cost of Ownership Models for Line of Business Mobile Solutions, Enterprise Mobility, VDC Research Group, December 2018
3. Typically used for PTT communications. Where regulatory restrictions exist, button is configurable for use with other applications.

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 for our mobile devices, 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>


DataWedge


Device Tracker


EMDK for Android and Xamarin


Enterprise Browser


Enterprise Keyboard


Enterprise Home Screen


LifeGuard


Mx Mobility Extensions


PowerPrecision


PowerPrecision Console


Multi-Barcode Scanning


StageNow


PTT Express


Workforce Connect PTT Pro


Workforce Connect Voice


WorryFree WiFi



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