

FUTURE-PROOFING RETAILERS

THE POWER OF PURPOSE-BUILT DEVICES

A GUIDE FOR SOLUTION PROVIDERS



THE RIGHT TECHNOLOGY

The steady adoption of digital technologies to automate processes, collect data, and make better decisions has taken on heightened urgency in recent years. The pandemic presented specialized challenges – from supply chain disruptions to wild demand swings – that magnified the need for greater operational flexibility, agility, and visibility through investments in future-focused solutions.

In retail, the shift to digital technology has mirrored the consumer's vigorous adoption of e-commerce and mobile platforms to make purchases, conduct research, compare prices, and check inventory for desired products. While digitally savvy shoppers and associates expect retailers to utilize the latest mobile technology, retail businesses shouldn't fall into the trap of deploying consumer-grade smartphones in their front-of-house or back-of-house operations. For salesfloor associates, delivery drivers, and other retail workers to be productive and efficient in this demanding retail environment, they don't just need the latest technology – *they need the right technology.*

85%

OF RETAIL ASSOCIATES
SAY THEY COULD PROVIDE A BETTER CUSTOMER EXPERIENCE IF THEY HAD ENTERPRISE-GRADE MOBILE COMPUTERS WITH BUILT-IN SCANNERS TO USE ON THE JOB.

14th Annual Zebra Global Shopper Study: The Next Wave of Retail Fulfilment

SAVE NOW OR SAVE LATER

The challenges of the past few years have accelerated the rollout of mobile solutions that hold the potential to optimize outdated and inefficient processes. Retailers are equipping their personnel with mobile computers, tablets, and scanners to automate tasks such as order entry, staff scheduling, and inventory management. “Deployment of the proper mobile solution can boost workflows, improve employee productivity, provide greater visibility and data analytics into processes, and reduce costs,” VDC Research explains. [“However, it is critical for enterprises to align their workflows and use cases with the best-fit mobile solutions.”](#)

Viewed strictly through the lens of upfront costs, a consumer device might seem like the best fit for a retail business. In reality, however, the “value proposition” of a consumer-grade mobile device falls short when you consider factors such as durability, battery life, connectivity, productivity, replacement costs, and device management – factors that play into the **total cost of ownership**. As a value-added reseller, it’s critical to be able to explain why purpose-built, enterprise-grade devices and software offer the best fit – and the strongest ROI – for today’s retailers.

EVERY TIME A
CONSUMER-
GRADE TABLET
FAILS, THERE’S
AN AVERAGE OF
74 MINUTES
OF LOST
PRODUCTIVITY.



CONSUMER DEVICES *VS.* ENTERPRISE-GRADE DEVICES: A SCORECARD

While consumer-grade mobile devices are cheaper upfront, there are hidden costs to consider – such as the need to buy protective cases to increase durability or the need for a separate scanner to ensure fast, accurate capture of barcodes and RFID tags. Even the most cost-conscious retailers should be aware that consumer-grade hardware isn't cheap when you look at the total cost of ownership (TCO). To help your customers see the big picture, here's a breakdown of how consumer-grade devices stack up against purpose-built, enterprise-grade devices in areas of critical importance for retailers.

IN THE DEMANDING, FAST-PACED WORLD OF RETAIL, CONSUMER-GRADE DEVICES JUST DON'T MAKE THE GRADE.
ENTERPRISE-GRADE HARDWARE AND SOFTWARE ARE PURPOSE-BUILT TO MAXIMIZE EMPLOYEE PRODUCTIVITY, DRIVE WORKFLOW EFFICIENCIES, AND LOWER THE TCO IN RETAIL OPERATIONS.

SEE NEXT PAGE FOR COMPARISON

CONSUMER-GRADE DEVICES



WHICH DEVICE HOLDS THE EDGE?



ENTERPRISE-GRADE DEVICES



DURABILITY: NOT RUGGED

Not designed for continuous use in demanding environments; More downtime and more frequent device replacements

BATTERY LIFE: NO MULTI-SHIFT POWER SUPPORT

Not replaceable - remove from service to charge; No optional second battery; No visibility into battery health

CONNECTIVITY: LESS RELIABLE CONNECTIVITY

Typically based on older, slower wireless standards; More likely to have connectivity issues that impact productivity

SECURITY: MORE VULNERABLE TO CYBER ATTACKS

Lack the proper encryption, EMM, and OEM tools for managing device-security settings; Lack robust built-in security features

FUNCTIONALITY: NO INTEGRATED ENTERPRISE SCANNER

Need to purchase and manage separate scanners (more devices for workers to carry); Integrated camera requires alignment with barcode; Can struggle capturing damaged or dirty barcodes

PRODUCTIVITY: MORE DOWNTIME

Lack of rugged design and predictive MDM tools translate into more device downtime and IT interventions; Batteries not lasting an entire shift drastically reduces productivity

TOTAL COST OF OWNERSHIP (TCO): HIGHER TCO

Higher rate of device failures, more frequent device replacements, higher IT-support costs, lost productivity, and extra hard costs (need to purchase separate enterprise scanners) all contribute to a high five-year TCO



DURABILITY: RUGGED

Built to withstand drops, water exposure, extreme temperatures, vibration, and dust (the top reasons mobile devices fail)

BATTERY LIFE: MULTI-SHIFT POWER

Replaceable/swappable; Uninterrupted power with optional hot-swappable secondary battery; Real-time data to identify and replace unhealthy batteries; Fast charging

CONNECTIVITY: 5G/ENTERPRISE-CLASS WI-FI 6

The latest and fastest wireless technology (including Wi-Fi 6 and 5G) for anywhere/anytime connectivity

SECURITY: MULTIPLE LEVELS OF PROTECTION

Integrate multiple layers of security and leverage various tools to fortify devices used in data-sensitive environments; Provide more control over management of security settings and updates

FUNCTIONALITY: INTEGRATED ENTERPRISE-CLASS SCANNER

First-time/every-time capture of virtually every barcode in practically any condition; Point-and-shoot simplicity; No separate devices to purchase or for workers to lose; No need to align device with barcode

PRODUCTIVITY: MORE UPTIME, HIGHER PRODUCTIVITY

Rugged design and multi-shift battery power maximize device availability; Robust monitoring capabilities, diagnostic tools, and analytics empower IT teams to address issues before they impact productivity

TOTAL COST OF OWNERSHIP (TCO): LOWER TCO - MAXIMUM VALUE

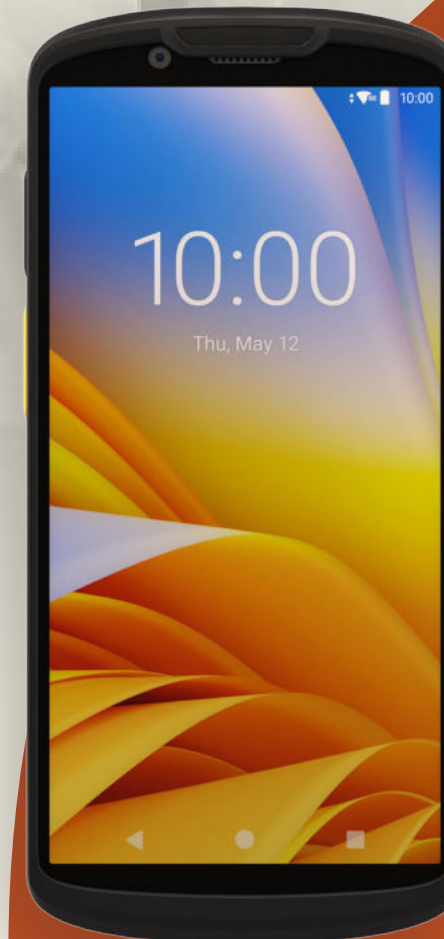
Enterprise devices are more reliable - maximizing uptime, minimizing lost productivity, and reducing IT-support costs; No need to purchase separate scanner; Lifecycles between 3-5 years minimum (vs. 1-2 years on consumer-grade devices)

WHY ENTERPRISE-GRADE DEVICES?

DURABILITY

Retail operations encompass a diverse range of settings and workflows, all with their own challenges. Salesfloors can be inside or outside (or a combination of both), and mobile devices can be exposed to temperature extremes, moisture, and other harsh conditions. Backrooms and warehouses tend to be dusty, rough-and-tumble environments with floors that aren't very forgiving when a device is dropped from a forklift or ladder. In a delivery vehicle, a tablet or touch computer must be able to shake off daily bumps and bruises without missing a beat.

Consumer-grade mobile devices aren't designed for continuous use in demanding retail environments and other enterprise settings. As a result, companies with fleets of consumer tablets and mobile computers experience more frequent IT interventions and device replacements. [In fact, retailers can expect workers to submit 20% more support tickets with consumer devices due to their lack of rugged design and troubleshooting tools.](#)



RUGGED ENTERPRISE-GRADE DEVICES are purpose-built to withstand drops, dings, spills, vibration, and adverse environmental conditions encountered across retail operations. With TC53/TC58 touch computers from Zebra Technologies, retail employees can drop their device in water or on concrete, use it in dusty, rainy, or snowy conditions – and still expect reliable operation. The unibody design provides extra impact protection, while Corning Gorilla Glass provides maximum scratch resistance and shatter-proofing for the touch panel and imager window.



WHY ENTERPRISE-GRADE DEVICES?

RELIABILITY

Next to out-of-stock complaints, the biggest frustrations of retail associates working in customer-facing roles include requests for price checks and requests for product information, according to the 14th Annual Zebra Global Shopper Study. Retail employers and their associate recognize the value of using mobile technology to improve customer service and streamline workflows. However, that value is negated when a retail employee has to explain to a customer that they can't pull up product, pricing, or shipment information immediately because a consumer-grade device is sluggish, offline due to a dead battery, or struggling to connect to wireless networks or back-office systems.

In terms of reliability, retail associates pay a high price when their employers try to save money by deploying a "cheaper" consumer device that's deemed "good enough" for now. Consumer-grade devices experience more battery-related downtime than enterprise devices, because consumer batteries aren't meant to last all shift long. [As a result, workers lose an average of 54 minutes of productivity each time they have to charge their consumer tablet or mobile computer.](#) Maintaining network connectivity is a problem as well. Consumer-grade devices tend to have spottier connectivity because they're typically based on older, slower wireless standards. [Consumer-grade devices are 28% more likely to experience wireless-connectivity issues that undermine productivity compared to enterprise-grade devices.](#)

ENTERPRISE-GRADE DEVICES are purpose-built to provide worry-free connectivity and multi-shift battery power for retail associates – whether they're on the salesfloor, in the warehouse, or on the road. ET40/ET45 enterprise tablets from Zebra Technologies feature the latest and fastest wireless technology (including Wi-Fi 6 and 5G) for anywhere/anytime connectivity. Zebra's PowerPrecision batteries provide real-time intelligence that makes it easy to spot and discard unhealthy batteries that no longer hold a full charge, while an optional hot-swappable secondary battery delivers uninterrupted power – ideal for multiple shifts.



WHY ENTERPRISE-GRADE DEVICES?

FUNCTIONALITY

Today's mobile devices are smarter and more sophisticated than ever, placing a previously unthinkable amount of computing power in the hands of everyday users. That's not lost on retail personnel. In the 14th Annual Zebra Global Shopper Study, 85% of retail associates said they can provide a better customer experience using handheld mobile computers equipped with scanners, while 84% said the same of handheld barcode scanners. However, not all devices are created equal.

Consumer-grade devices lack the purpose-built features and functionality needed for associates to perform their daily tasks efficiently and effectively in retail operations and other enterprise settings. While later-model smartphones can scan QR codes and barcodes, they're not designed for the intensive, fast-paced, point-and-shoot scanning that's required in retail settings. Their integrated cameras require close alignment with the barcodes, and they're ill-equipped to quickly capture barcodes that are damaged, dirty, faded, or poorly printed. The need to purchase separate scanners pushes the TCO higher, and adds more devices for workers to carry and manage.



THE WS50 IS THE WORLD'S SMALLEST ALL-IN-ONE ANDROID ENTERPRISE CLASS WEARABLE MOBILE COMPUTER. Small, rugged, and suitable to use in various environments, it gives mobile users the ability to access relevant information anywhere in their facility, helping to improve operational efficiency by reducing the time and steps taken to complete just about any task. It's a versatile computing core with a modular design that lets users choose the mount that's right for the job: wrist, back of hand or two-finger. Plus – it's a voice communication device, with the ability to integrate a barcode scanner or camera. When it comes to data capture, there's no need for a multiple-piece wearable solution when this all-in-one device can do it all.

WHY ENTERPRISE-GRADE DEVICES? PRODUCTIVITY

Retail associates are increasingly reliant on mobile devices to perform their day-to-day activities, and they prefer it that way. According to the 14th Annual Zebra Global Shopper Study, nearly three-quarters of retail associates say they'd rather manage tasks and manage their schedules via a mobile device. More and more retailers are putting a device in every associate's hand with the goal of improving task management, scheduling, communication, collaboration, and inventory visibility.

In this environment, mobility and productivity have become intertwined. If a device goes down, so does a worker. As mentioned previously, consumer devices fail more often because they're not built for continuous use in demanding retail environments, and they experience more battery-related downtime. Compounding the problem, consumer mobile devices are a minefield for IT teams to monitor, manage, and secure, as they lack the robust mobile-device-management (MDM) capabilities that are critical to ensuring device operability. Even if an MDM solution is in place, IT personnel typically have limited real-time visibility into device performance, and don't have the benefit of a centralized platform to remotely deploy, configure, monitor, troubleshoot, and maintain devices.



ENTERPRISE-DEVICE OEMS such as Zebra offer the device-management services that allow for real-time visibility and analysis of devices so IT personnel are empowered with actionable insights to maximize device availability and anticipate performance issues before they impact worker productivity. For example, all Zebra scanners are engineered with DataCapture DNA – a suite of built-in applications, utilities, and tools that maximize device performance from deployment and management to scanner-fleet optimization, integration, and security. IT professionals can simplify fleet management with remote management and troubleshooting; update firmware, view stats, and generate reports; and correct small issues before they escalate into big problems.

With Remote Diagnostics, IT professionals benefit from up-to-the-minute insight into every aspect of the DS8100 handheld imagers in their fleet. The logging agent's Remote Diagnostics capabilities automate the recording of scanner-asset information, health, and statistics, configuration settings, and barcode data – providing the information needed for event verification, blockchain traceability, pilot-site ROI generation, troubleshooting, and predictive fleetwide trend analysis.



ET40/ET45 ENTERPRISE TABLETS

The ET40 and ET45 enterprise tablets can help retailers create a more flexible, collaborative, and intuitive work experience for associates – whether they're on the salesfloor, in a warehouse, or on the road. With fast Wi-Fi and cellular speeds, drop-resistant construction, and multi-shift battery power, the ET40 and ET45 deliver the day-to-day reliability and connectivity that a consumer-grade device can't. Time-saving features such as integrated barcode scanning can improve productivity, accuracy, and quality, while providing real-time visibility into orders and inventory levels.

Zebra's ET40 (for workers inside facilities) and ET45 (for workers out in the field) are right-priced, enterprise-grade tablets that are built for business – and built to last.



FEATURES & BENEFITS

- World-class integrated scanning – capture any barcode in any condition
- PowerPrecision batteries for multi-shift dependability
- Easy-to-carry 8-inch screen or 10-inch display for easier viewing of information-rich apps
- The latest/fastest wireless connections – including Wi-Fi 6 and 5G
- Powerful communication tools – instant push-to-talk and secure text messaging available
- Business-class lifecycle with guaranteed availability and support
- Powerful pre-installed Mobility DNA tools ready to use at no cost

APPLICATIONS

- Simultaneously capture up to 100 barcodes – even on multiple labels – with a single scan.
- Take inventory inside the delivery truck, and quickly locate the right package at each stop.
- Take sharp, detailed photographs for proof-of-condition and delivery, visual in-store merchandising audits, and more.
- Boost productivity with the latest and fastest wireless connections.
- Payment-ready – create a mobile point-of-sale for anywhere payment.
- View real-time task lists, ranked by priority level.

FOR MORE INFORMATION, VISIT
WWW.BLUESTARINC.COM/US-EN/MANUFACTURERS/MANUFACTURER-MICROSITES/ZEBRA/ET40ET45.HTML

TC53/TC58 TOUCH COMPUTERS



Zebra's new mobile computers, the TC53 and TC58, are part of a new generation of devices that promise to redefine mobile computing performance with new hardware and sensor technologies. The devices are equipped with the latest wireless technologies, including 5G, Wi-Fi 6E, and CBRS (US only), providing faster and more reliable access to information. The 6-inch screen and Zebra-only Mobility DNA tools help maximize user productivity while minimizing IT complexities throughout the entire device lifecycle. Additionally, the TC53 and TC58 are thinner and more rugged, thanks to new manufacturing technologies. These new mobile computers represent a new level of operational efficiency and workforce productivity, driving new possibilities into the world of mobility.

FOR MORE INFORMATION, VISIT
WWW.BLUESTARINC.COM/US-EN/MANUFACTURERS/MANUFACTURER-MICROSITES/ZEBRA/TC53-TC58.HTML

FEATURES & BENEFITS

- Rugged design - withstands multiple 6-foot drops to concrete
- Familiar and flexible multi-touch operation; 5-inch display with best-in-class outdoor readability
- Omnidirectional scanning for true point-and-shoot simplicity
- High-capacity battery delivers up to 14 hours of power; no need to shut down device/apps when swapping batteries
- Familiar Android OS eliminates training time and adoption curves
- WorryFree Wi-Fi - near-instant application response times, unmatched roaming performance
- Ultra-powerful processor and built-in support for future Android versions and apps (such as AI)

APPLICATIONS

- 13-MP color rear camera captures highly detailed photos and videos - ideal for proof-of-condition/delivery/service and more
- Expanded working range and wide field of view allow workers to scan barcodes nearer and farther away.
- Boost Wi-Fi network capacity, speed, and range with 2x2 MU-MIMO wireless technology.
- New front-facing camera comes with built-in support for Visible Light Communication (VLC) - track the location of shoppers and workers with compatible overhead LED

DS8100 SERIES HANDHELD IMAGERS

With the DS8100 Series handheld imager, retailers can elevate the customer experience and deliver frictionless transactions at every touchpoint – from cashier-manned and self-checkout lanes to curbside and in-store pickup. The DS8100 Series combines the power of an 800-MHz microprocessor, best-in-class sensor resolution, and Zebra’s exclusive PRZM Intelligent Imaging technology. With this unique combination of hardware and advanced algorithms, the DS8100 instantly captures the most problematic barcodes – including dense, poorly printed, crinkled, faded, distorted, dirty, or damaged, as well as electronic barcodes on dimly lit displays. And every DS8100 Series imager is engineered with DataCapture DNA, Zebra’s exclusive software ecosystem that simplifies every stage of the scanning experience over the life of the device.



FEATURES & BENEFITS

- Scanning range up to 24 in./61 cm, high-resolution imaging sensor, and bright “aiming spot” for improved checkout speed
- Two swappable power options
- PowerPrecision+ battery provides 3 days of continuous scanning on a single charge
- Remote Diagnostics
- Supports Digimarc digital watermark technology, enabling faster checkouts and easier self-checkout
- AutoConfig cradle automatically configures DS8178 for specific workflows
- Anti-loss tools prevent downtime

APPLICATIONS

- Identify and eliminate poor-performing barcodes.
- With AutoConfig, convert DS8178 from self-checkout to manned lane, customer service, inventory, or receiving – without having to change settings.
- Cradle and scanner will alert users when a device is taken out of range or uncradled for extended period (Virtual Tether).
- With Multi-Code Data Formatting, capture multiple barcodes with a single scan.
- Easily spot and replace aging batteries before battery failures cause checkout delays.

ABOUT ZEBRA + BLUESTAR



ABOUT ZEBRA TECHNOLOGIES

With the unparalleled visibility Zebra provides, enterprises become as smart and connected as the world we live in. Real-time information – gleaned from visionary solutions including hardware, software, and services – gives organizations the competitive edge they need to simplify operations, know more about their businesses and customers, and empower their mobile workers to succeed in today's data-centric world. For more information, visit www.zebra.com.



ABOUT BLUESTAR

BlueStar is the leading global distributor of solutions-based ADC, mobility, point-of-sale, RFID, digital signage, and security technology. BlueStar works exclusively with value-added resellers, providing them with complete solutions, business development, and marketing support. The company brings unequaled expertise to the market, offers award-winning technical support, and is an authorized service center for a growing number of manufacturers. BlueStar is the exclusive distributor for the In-a-Box Solutions Series, delivering hardware, software, and critical accessories in one bundle with technology solutions across all verticals. For more information, please contact the BlueStar Zebra BDM Team at zebra@bluestarinc.com or visit the microsite at www.bluestarinc.com/us-en/zebra.html



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