# **TC52/TC57 Series Specifications**

PHYSICAL CHARACTERI	STICS
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. High Definition (1280 x 720); 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 antismudge coating
Backlight	LED backlight
Power	Rechargeable Li-lon, Power Precision +, 4300mAh/15.48Wh typical, 4.2V Cell Charge voltage, Cell nominal voltage 3.6V, Improved battery metrics for better battery management; fast USB charging (500 mA)
Expansion Slot	User accessible MicroSD up to 32GB SDHC and up to 256 GB SDXC
SIM Slots	TC57 only: 1 nano SIM
Network Connections	TC52/TC57: WLAN, WPAN (Bluetooth), USB 2.0, High Speed (Host and Client) TC57 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; and SWB & FB audio
Buttons	Six programmable buttons for maximum flexibility: Back button, dual dedicated scan buttons, dedicated push-to-talk button and volume up/down buttons
PERFORMANCE CHARA	CTERISTICS
СРИ	Qualcomm Snapdragon™ 660 octa-core, 2.2 GHz
Operating System	<b>TC52:</b> Android 9 Pie upgradeable through Android R <b>TC57:</b> Android 8 Oreo upgradeable though Android R Both with Zebra's Restricted Mode for control over GMS and other services.
Memory	4GB RAM/32GB 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 4 ft./1.2 m to tile over concrete over -10°C to 50°C (14°F to 122°F) Multiple 6ft. drops to concrete with the rugged boot accessory per MIL STD 810 G
Tumble Specification	500 1.6 ft./0.5 m tumbles, meets or exceeds IEC tumble specification
Sealing	IP67 and IP65 per applicable IEC sealing specifications
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

USER ENVIRONMENT (	CONTINUED/
Thermal Shock	-40° F to 158° F/-40° C to 70° C rapid transition
Electrostatic Discharge (ESD)	+/- 15kv air discharge; +/- 8kv direct discharge; +/- 8kv indirect discharge
INTERACTIVE SENSOR	TECHNOLOGY (IST)
Light Sensor	Automatically adjusts display backlight brightness
Magnetometer	eCompass automatically detects direction and orientation
Motion Sensor	3-axis Accelerometer with MEMS Gyro
Pressure Sensor	Automatically detects altitude information for locating (TC57 only)
Proximity Sensor	Automatically detects when the user places the handset against head during a phone call to disab display output and touch input
DATA CAPTURE	
Scanning	SE4710 imager (1D and 2D) with extraordinary rang Scan range – Code 39 barcode: 20 Mil: 1.8 in. to 32.0 in./4.5 cm to 81.3 cm 3 Mil: 3.1 in. to 5.6 in./7.9 cm to 14.2 cm Digimarc support
Camera	Front — 5 MP; f/2.0 aperture Rear — 13 MP autofocus; f/2.2 aperture; flash LED generates balanced white light; supports Torch mod
NFC	ISO 14443 Type A and B; FeliCa and ISO 15693 cards; P2P mode and Card Emulation via Host. TC57 Only: Card Emulation via Host and UICC
WIRELESS WAN DATA A	ND VOICE COMMUNICATIONS (TC57 ONLY)
Radio Frequency Band	Supports VoLTE , Carrier Aggregation up to 3DL C AT&T FirstNet Ready certification Verizon PNTM certification LTE FDD: 700/800/850/900/1800/1900/ AWS/2100/2600 (28,13,14,12,17/19,20/5,26/8/3/2, 25/4,66/1/7); LTE TDD: 1900/2300/2500 (39/40/41,38); UMTS/HSPA/HSPA+: 850/900/AWS/1900/2100 (5/8/4/2/1); GSM/GPRS/EDGE: 850/900/1800/1900
GPS	TC57 only: Autonomous, Concurrent GPS; GLONASS; Gallileo; BeiDou, and A-GPS. Supports IZAT™ XTRA
Multimedia	Wi-Fi Multimedia™ (WMM) and WMM-PS; Including TSPEC
WIRELESS LAN	
Radio	TC52: IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v³/w; Wi-Fi™ certified; IPv4, IPv6, 2x2 MU-MIMO TC57: IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v³/w; Wi-Fi™ certified; IPv4, IPv6, 5GHz 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	Channel 1-13 (2412-2472 MHz): 1,2,3,4,5,6,7,8,9,10,11,12,13 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 0,144,149,153,157,161,165 Channel Bandwidth: 20, 40, 80 MHz Actual operating channels/ frequencies and bandwidths depend on regulatory rules and

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# TC52/TC57 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 automatiion
- · Delivery tracking
- Inventory management
- Customer support

#### FIELD SERVICE **TECHNICIANS**

- Asset management
- Parts inventory
- Invoicing
- · Scheduling and location-based services

## LIGHT COURIER **DRIVERS**

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

#### **GOVERNMENT AND PUBLIC SAFETY**

- eCitation
- Situational awareness
- · Communication and collaboration
- Asset management