## **TC20** Specifications

TC20 ALL-TOUCH: 5.27 in, L x 2.82 in, W x. 63 in, D 134 mm U x 73.1 mm W x 16 mm DTC20 WITH KEYBOARD: 6.45 in, L x 2.82 in, W x. 63 in, D 164 mm L x 73.1 mm W x 16 mm DWeightTC20 ALL-TOUCH: 6.88 oz./195 g TC20 WITH KEYBOARD: 7.58 oz./215 gDisplay4.3 in, color WVGA (800x480); LED backlight; Corning Gorilla GlassTouch PanelCapacity The KeyBoARD: 7.58 oz./215 gPowerCapacity The Capacity E Touch Panel; multi-touchNon-removable Rechargeable Li-lon: standard capacity, 3000mAh Charge in under 4 hours (10hrs = 1 Shift) RTC backupExpansion SlotOne 128GB micro SD slotNetwork ConnectionsOne USB OTG - host/client (Type C connector)NotificationsUnsolicited packet data and programmableKeypadTC20 All-Touch: On-screen Keypad TC20 Keyboard: NumericVoicePTT Pro, PTT Express Speaker -1 Watt (94dBA) Voice support (Internal speaker/microphone) 2 microphones Audio jackButtonsScan on each side, Volume Up/Down, Power-optimiztionOperating SystemAndroid Nougat 7.XMemory2GB RAM/16 GB Flash memorySecurityVerified BootUSER ENVIRONMENT Temperature-40° F to 158° F / -40° C to 70° COperating Temperature14° Fto 122° F / -10° C to 50° CStorage Temperature-40° F to 158° F / -40° C to 70° CDescing Temperature900 tumbles, 1.6 ft./0.5 mSeealingIP54	PHYSICAL CHARACTERISTICS		
Weight   TC20 WITH KEYBOARD: 7.58 oz./215 g     Display   4.3 in. color WVGA (800x480); LED backlight; Corning Gorilla Glass     Imager Window   Corning Gorilla Glass     Touch Panel   Capacitive Touch Panel; multi-touch     Non-removable   Rechargeable Li-lon: standard capacity, 3000mAh     Power   3000mAh     Charge in under 4 hours (10hrs = 1 Shift)     RTC backup     Expansion Slot   One 128GB micro SD slot     Network   One USB OTG - host/client     Connections   (Type C connector)     Notifications   Unsolicited packet data and programmable     Keypad   TC20 All-Touch: On-screen Keypad     TC20 Keyboard: Numeric   Voice     Voice   PTT Pro, PTT Express     Audio   Scan on each side, Volume Up/Down, Power, push-to-talk (PTT) Key     PERFORMANCE CHARACTERISTICS   CPU     OCOM MSM8937* 64-bit 8-Core, ARM*   Cortex A53 1.4GHz, 512KB L2 cache, power-optimization     Operating System   Android Nougat 7.X     Memory   2GB RAM/16 GB Flash memory     Security   Verified Boot     USER ENVIRONMENT   Operating T4* Fto 158* F / -40* C to 70* C     Drop   Multiple 4 ft./1.2	Dimensions	5.27 in. L x 2.82 in. W x .63 in. D 134 mm L x 73.1 mm W x 16 mm D <b>TC20 WITH KEYBOARD:</b> 6.45 in. L x 2.82 in W x .63 in. D	
DisplayCorning Gorilla GlassImager WindowCorning Gorilla GlassTouch PanelCapacitive Touch Panel; multi-touchNon-removableRechargeable Li-Ion: standard capacity, 3000mAh Charge in under 4 hours (10hrs = 1 Shift) RTC backupExpansion SlotOne 128GB micro SD slotNetworkOne USB OTG - host/client ConnectionsConnections(Type C connector)NotificationsUnsolicited packet data and programmableKeypadTC20 All-Touch: On-screen Keypad TC20 Keyboard: NumericVoicePTT Pro, PTT ExpressSpeaker -1 Watt (94dBA) Voice support (Internal speaker/microphone) 2 microphones Audio jackButtonsScan on each side, Volume Up/Down, Power, push-to-talk (PTT) KeyPERFORMANCE CHARACTERISTICSCPUQCOM MSM8937* 64-bit 8-Core, ARM* Cortex A53 1.4GHz, 512KB L2 cache, power-optimizationOperating SystemAndroid Nougat 7.XMemory2GB RAM/16 GB Flash memorySecurityVerified BootUSER ENVIRONMENTOperating TemperatureOperating Temperature14° F to 122° F / -10° C to 50° CStorage Temperature-40° F to 158° F / -40° C to 70° CDrop SpecificationsMultiple 4 ft./1.2 m drop to tile over concrete 	Weight	÷	
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Keypad   TC20 Keyboard: Numeric     Voice   PTT Pro, PTT Express     Speaker - 1 Watt (94dBA)   Voice support (Internal speaker/microphone)     Audio   2 microphones     Audio jack   Scan on each side, Volume Up/Down, Power, push-to-talk (PTT) Key     PERFORMANCE CHARACTERISTICS     CPU   QCOM MSM8937® 64-bit 8-Core, ARM® Cortex A53 1.4GHz, 512KB L2 cache, power-optimization     Operating System   Android Nougat 7.X     Memory   2GB RAM/16 GB Flash memory     Security   Verified Boot     USER ENVIRONMENT   Operating Temperature     04° F to 122° F / -10° C to 50° C   Storage Temperature     -40° F to 158° F / -40° C to 70° C   Drop Drop     Multiple 4 ft./1.2 m drop to tile over concrete per MIL-STD at room temperature     Tumble Specifications   300 tumbles, 1.6 ft./0.5 m	Notifications	Unsolicited packet data and programmable	
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Buttons     Power, push-to-talk (PTT) Key       PERFORMANCE CHARACTERISTICS       CPU     QCOM MSM8937® 64-bit 8-Core, ARM® Cortex A53 1.4GHz, 512KB L2 cache, power-optimization       Operating System     Android Nougat 7.X       Memory     2GB RAM/16 GB Flash memory       Security     Verified Boot       USER ENVIRONMENT     Operating Temperature       04° F to 122° F / -10° C to 50° C     Storage Temperature       -40° F to 158° F / -40° C to 70° C     Drop       Multiple 4 ft./1.2 m drop to tile over concrete per MIL-STD at room temperature     300 tumbles, 1.6 ft./0.5 m	Audio	Voice support (Internal speaker/microphone) 2 microphones	
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Sealing IP54		300 tumbles, 1.6 ft./0.5 m	
	Sealing	IP54	

USER ENVIRONI	MENT (CONTINUED)
Vibration	4G peak, 5 Hz to 2 kHz, 1 hour duration per axis
Thermal Shock	-40°C to 70°C rapid transition 10 cycles (1 cycle = 1.25 hours at -40°C and 1.25 hours at 70°C)
Electrostatic Discharge (ESD)	+/-15kv Air, +/-8kv contact, +/-8kv charge body
INTERACTIVE SE	INSOR TECHNOLOGY (IST)
Accelerometer (3-a)	kis), ambient light sensor, proximity sensor
DATA CAPTURE	
Scanning	SE2100 1D/2D imager SE4710 1D/2D imager + rear camera
Rear Camera	8MP autofocus color camera with flash
RFID	RFD2000 UHF RFID snap-on sled
WIRELESS LAN	
VLAN Radio	802.11 a/b/g/n/ac/d/r/h/i IPv4, IPv6
Data Rates	2.4 GHz: 20 MHz, 40 MHz 5 GHz: 20 MHz, 40 MHz, 80 MHz
Operating Channels	2.4 GHz (channels 1-13; 1-11(US)) 5GHz (channels 36-48, 52-64, 100-144, 149-165) Actual operating channels/ frequencies and bandwidths depend on regulatory rules and certification agency.
Security and Encryption	WPA/WPA2 (PSK & Enterprise 802.1x); EAP- TTLS; PEAPv0-MSCHAPv2; EAP-TLS
Certifications	802.11a/b/g/n; WPA; WPA2
ast Roam	802.11r
VIRELESS PAN	
Bluetooth	Bluetooth 4.2 BLE
MOBILITY DNA S	SOLUTIONS
📐 DataWedge	🧿 Lifeguard <sup>™</sup> for Android <sup>™</sup>
EMM Tool Kit	Mobility Extensions (Mx)
Enterprise Hom	e Screen 🔮 StageNow
	🐲 Smart Dex
and a Support Contr	able on Android only. Features may vary by model act may be required. To learn what solutions are sit: https://developer.zebra.com/mobilitydna
WARRANTY	
TC20 is warranted a for a period of 1 (one	s of Zebra's hardware warranty statement, the against defects in workmanship and materials e) year from the date of shipment. For complete , please visit: www.zebra.com/warranty

RECOMMENDED SERVICES

Zebra OneCare™ SV

\* Just set up the pre-installed, free Workforce Connect PTT Express software to enable calls between workers carrying the TC20 and any Zebra PTT Express-enabled compatible Android or Windows mobile device.

## Put the TC20 to work in:

## Retail

- Front of store
- Back of store
- Stocking
- Receiving
- Shipping/Truck loading
- BOPIS (buy online, pick up in store)
- lospitality
- Order taking
- Light warehouse
- Stocking
- Receiving
- Shipping/Truck loading