

Specifications



Note • Printer specifications are subject to change without notice.

Printing Specifications

Parameter	ZQ510	ZQ520
Print Width	Max 72 mm (2.83 in.)	Max 104 mm (4.09 in.)
Print Speed	101.6 mm (4 in.)/second @ 12% max density	88.9 mm (3.5 in.)/second @ 12% max density
	76.2 mm (3 in.)/second @ 16% max density (linerless media)	76.2 mm (3 in.)/second @ 16% max density (linerless media)
Printhead Burn Line to Tear Edge Distance	4.8 mm (0.18 in.) +/- 0.5 mm (0.02 in.)	4.8 mm (0.18 in.) +/- 0.5 mm (0.02 in.)
Printhead Life	600,000 inches Mean Time to Failure of output at 18% density at 20C using virgin media	600,000 inches Mean Time to Failure of output at 18% density at 20C using virgin media
Print Density	203 dots/in. or better	203 dots/in. or better

Memory and Communications Specifications

Parameter	ZQ510	ZQ520
Flash Memory	512 MB	512 MB
RAM Memory	256 MB	256 MB
Standard Communications	USB (Micro AB on the go)	USB (Micro AB on the go)
Wireless Communication	Dual Mode Bluetooth 2.1+EDR/4.0 Low Energy	Dual Mode Bluetooth 2.1+EDR/4.0 Low Energy
	Dual Radio (BT 3.0/802.11 a/b/g/n)	Dual Radio (BT 3.0/802.11 a/b/g/n)

Label Specifications

Parameter	ZQ510	ZQ520
Media Width	35 mm (1.38 in.) to 80 mm (3.15 in.)	70 mm (2.75 in.) to 113 mm (4.45 in.)
Media Length	12.5 mm (0.5 in.) minimum	12.5 mm (0.5 in.) minimum
Black Bar Sensor to Printhead Burnline Distance	16 mm (0.62 in.) +/- 0.6 mm (0.02 in.)	0.62 in. (16 mm) +/- 0.6 mm (0.02 in.)
Media Thickness	0.058 mm (0.002 in.) to 0.161 mm (0.006 in.)	0.058 mm (0.002 in.) to 0.161 mm (0.006 in.)
Max Tag Thickness	0.139 mm (0.005 in.)	0.139 mm (0.005 in.)
Max Roll Outer Diameter	51 mm (2.0 in.)	57 mm (2.25 in.)
Inner Core Diameters	19 mm (0.75 in.) standard 12.5 mm (0.5 in.) optional*	19 mm (0.75 in.) standard 12.5 mm (0.5 in.) optional*
Black Mark Location	Centered on media roll	Centered on media roll
Black Mark Dimensions	L: 2.4 mm to 11.0 mm (0.09 in. to 0.43 in.) W: 12.7 mm (0.5 in.)	L: 2.4 mm to 11.0 mm (0.09 in. to 0.43 in.) W: 12.7 mm (0.5 in.)



Note • Customers who want to use the 12.5 mm (0.5 in.) core size will be required to uninstall the media disks and install new media support disks (p/n P1063406-025).

CPCL Font and Bar Code Specifications and Commands

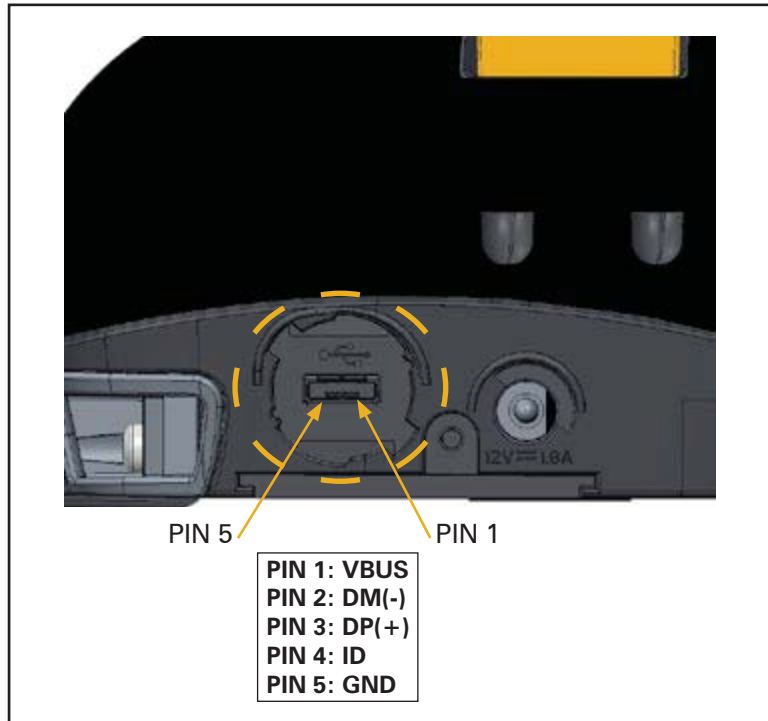
Standard Fonts	25 bit-mapped fonts; 1 scalable font (CG Trimvirate Bold Condensed*) *Contains Monotype UFST from downloadable optional bit-mapped & scalable fonts via Net Bridge software.	
Available Optional Fonts	Optional International character sets: Chinese 16 x 16 (trad), 16 x 16 (simplified), 24 x 24 (simplified); Japanese 16 x 16, 24 x 24	
Linear Bar Codes Available	Barcode (CPCL Command)	
	Aztec (AZTEC) Codabar (CODABAR, CODABAR 16) UCC/EAN 128 (UCCEAN128) Code 39 (39, 39C, F39, F39C) Code 93 (93) Code 128 (128) EAN 8, 13, 2 and 5 digit extensions (EAN8, EAN82, EAN85, EAN13, EAN132, and EAN135) EAN-8 Composite (EAN8) EAN-13 Composite (EAN13) Plessey (PLESSEY) Interleaved 2 of 5 (I2OF5) MSI (MSI, MSI10, MSI1110) FIM/POSTNET (FIM) TLC39 (TLC39) UCC Composite A/B/C (128(Auto)) UPCA, 2 and 5 digit extensions (UPCA2 and UPCA5) UPCA Composite (UPCA) UPCE, 2 and 5 digit extensions (UPCE2 and UPCE5) UPCE Composite (UPCE) MaxiCode (MAXICODE) PDF 417 (PDF-417) Datamatrix (using ZPL emulation) (DATAMATRIX) QR Code (QR)	
2-D Bar Codes Available	RSS:	RSS-14 (RSS-Subtype 1) RSS-14 Truncated (RSS-Subtype 2) RSS-14 Stacked (RSS-Subtype 3) RSS-14 Stacked Omnidirectional (RSS-Subtype 4) RSS Limited (RSS-Subtype 5) RSS Expanded (RSS-Subtype 6)
Rotation Angles	0°, 90°, 180°, and 270°	

ZPL Font and Bar Code Specifications and Commands

Standard Fonts	15 bit-mapped fonts; 1 scalable font (CG Trimvirate Bold Condensed*) Downloadable optional bit-mapped & scalable fonts via Net Bridge software.	
Available Optional Fonts	Zebra offers font kits covering multiple languages including Simplified and Traditional Chinese, Japanese, Korean, Hebrew/Arabic, and others.	
Linear Bar Codes Available 2-D Bar Codes Available	Barcode (CPCL Command)	
	Aztec (^B0) Codabar (^BK) Codablock (^BB) Code 11 (^B1) Code 39 (^B3) Code 49 (B4) Code 93 (^BA) Code 128 (^BC) DataMatrix (^BX) EAN-8 (^B8) EAN-13 (^BE) GS1 DataBar Omnidirectional (^BR) Industrial 2 of 5 (^BI) Interleaved 2 of 5 (^B2) ISBT-128 (^BC) LOGMARS (^BL) Micro-PDF417 (^BF) MSI (^BM) PDF-417 (^B7) Planet Code (^B5) Plessey (^BP) Postnet (^BZ) Standard 2 of 5 (^BJ) TLC39 (^BT) UPC/EAN extensions (^BS) UPC-A (^BU) UPC-E (^B9) Maxi Code (^BD) QR Code (^BQ)	
Rotation Angles	0°, 90°, 180°, and 270°	

Communication Port

USB



Physical, Environmental and Electrical Specifications

Parameter	ZQ510	ZQ520
Weight w/ battery	1.38 lbs. (22 oz)	1.72 lbs. (27.5 oz)
Temperature	Operating: -20 °C to 55 °C (-4 °F to 131 °F)	Operating: -20 °C to 55 °C (-4 °F to 131 °F)
	Storage: -30 °C to 66 °C (-22 °F to 150.8 °F)	Storage: -30 °C to 66 °C (-22 °F to 150.8 °F)
	Charging: 0 °C to 40 °C (32 °F to 104 °F)	Charging: 0 °C to 40 °C (32 °F to 104 °F)
Relative Humidity	Operating: 10% to 90% non-condensing	Operating: 10% to 90% non-condensing
Battery	Smart Battery (2 cell or 4 cell) Lithium-Ion, 7.4 VDC (nominal); 2.45 Ahr min.	Smart Battery (2 cell or 4 cell) Lithium-Ion, 7.4 VDC (nominal); 2.45 Ahr min.
Intrusion Protection (IP) Rating	IP54 (with and without optional environmental case)	IP54 (with and without optional environmental case)

Figure 22: ZQ510 Overall Dimensions

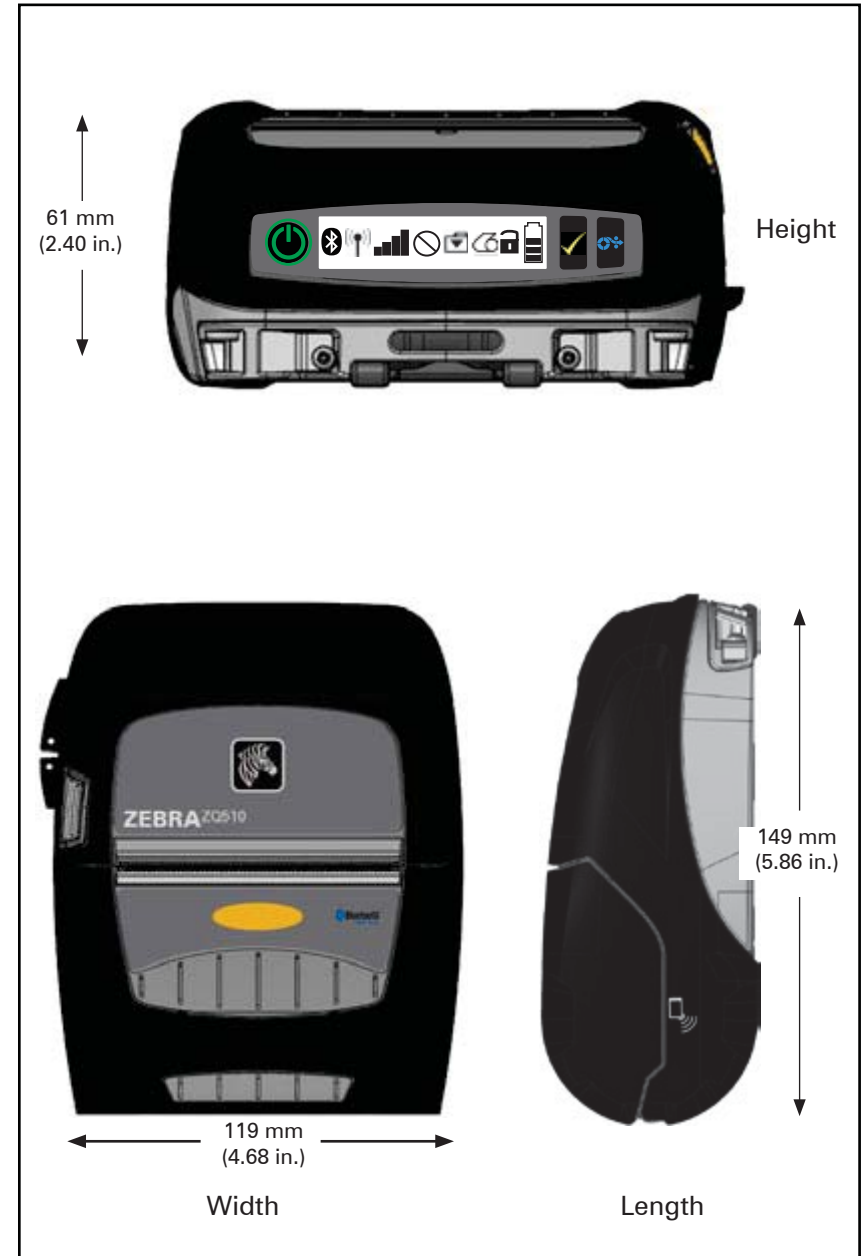
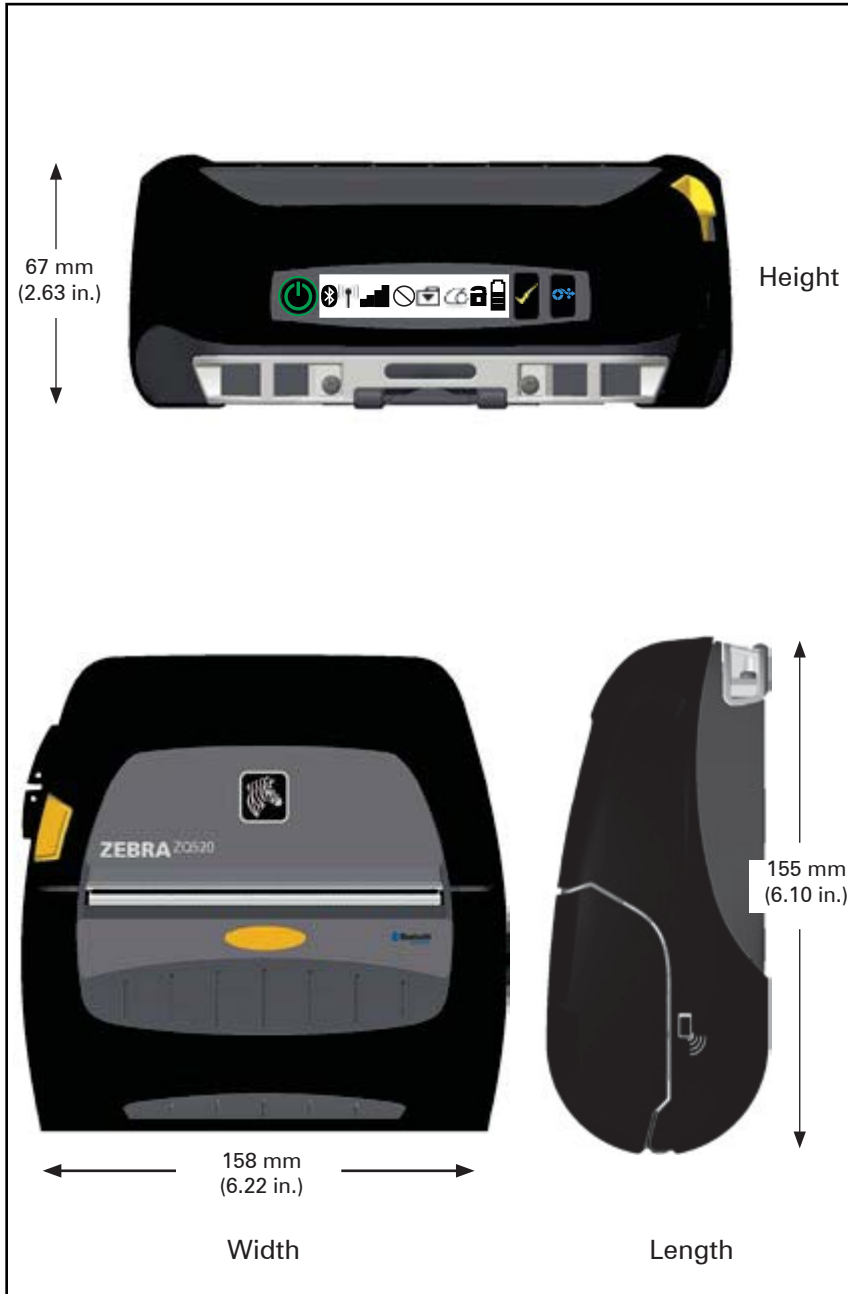


Figure 23: ZQ520 Overall Dimensions



ZQ500 Series Accessories

Part #	Description
P1063406-025	KIT, Acc .5" Media Disk Support, ZQ500 Series
P1063406-026	KIT, Acc Swivel Lock Adapter, ZQ500 Series
P1063406-027	KIT, Acc 4-BAY Power Station, ZQ500 Series
P1063406-028	KIT, Acc Battery Eliminator Cradle, ZQ500 Series
P1063406-029	KIT, Acc Vehicle Cradle, ZQ500 Series
P1063406-030	KIT, Acc DC-DC vehicle adapter, open ended, 12~24V
P1063406-031	KIT, Acc DC-DC vehicle adapter, CIG, 12~24V
P1063406-032	KIT, Acc Battery Eliminator, ZQ500 Series
P1063406-033	KIT, Acc Power Adapter for Mobile Battery Eliminator, 12~48V, Cigarette Lighter
P1063406-034	KIT, Acc Convert Cable, 6 inch, ZQ500 Series
P1063406-035	KIT, Acc Rugged Shoulder Strap with Metal Clips, 56 inch
P1063406-036	KIT, Acc Mag Card Reader, ZQ500 Series
P1063406-037	KIT, Acc Soft Case, ZQ510
P1063406-038	KIT, Acc Soft Case, ZQ520
P1063406-039	KIT, Acc 2-roll Media Storage Case
P1063406-040	KIT, Acc Belt Clip, ZQ500 Series
P1063406-041	KIT, Acc D-Ring Adapter Belt Attachment Strap, ZQ500 Series
P1063406-042	KIT, Acc RAM Arm Mounting Plate, ZQ500 Series
P1063406-043	KIT, Acc Exoskeleton Case with Shoulder Strap, ZQ510
P1063406-044	KIT, Acc Exoskeleton Case with Shoulder Strap, ZQ520
P1063406-045	KIT, Acc Micro,USB,B, to,USB,A,Plug,1.8M, ZQ500 Series
P1063406-046	KIT, Acc Micro,USB,B to USB,A,Plug, 3.5M, ZQ500 Series
P1063406-047	KIT, Acc Micro,USB,A to USB,A, Rec., ZQ500 Series
AC18177-5	Model UCLI72-4 Quad Battery Charger (US line cord, see Sales for others)
BT16899-1	Hand Strap
P1031365-024	KIT ACC QLn AC Adapter US (type A) cord
P1031365-059	KIT ACC QL220/QLN320 Spare Battery Smart
P1031365-063	Kit ACC SC2 Li-ION Smart Charger, US (type A) cord
P1031365-069	KIT, Acc QL2/3 and ZQ500 Series Spare Extended Battery