SPECIFICATIONS AT A GLANCE*

Printer Name

QLn420
For information about other printers in the QLn family, please visit our web site.

Standard Features

- Apple iOS, Android, Windows Mobile and BlackBerry connectivity
- Direct thermal printing of barcodes, text and graphics
- CPCL, EPL™ and ZPL® programming languages
- 256 MB Flash memory supports downloadable programs, receipt formats, fonts and graphics (64 MB available for user storage)
- 5.0 AH removable Li-Ion smart battery
- Built-in battery charger
- Serial and USB ports (both support strain relief)
- Belt clip for unobtrusive and convenient printing
- Black mark and gap media sensing using fixed center-position sensors
- Easy-to-use peel and present mode
- Label present sensor for issuing labels one at a time
- Tear bar for easy dispensing
- Center-loading media locking for variable roll widths
- "Clamshell" design for easy media loading
- Management: Mirror, SNMP, Web server, Profile Manager, AirWatch and Wavelink Avalanche®
- Large, easy-to-read LCD control panel (240 x 128 pixels)
- LCD can be customized using WML (text and icons)
- Printer alerts on the display, help menus
- Tolerance of multiple drops from 6'/1829 mm to concrete
- IP43 dust- and water-resistance rating (IP54 with soft case)
- 400 MHz 32-bit ARM processor
- XML support
- Supports vertical and horizontal printing
- Printers can be used in any orientation
- QR barcode links to web-based help pages
- Zebra Print Touch simplifies Bluetooth pairing and launches web-based help pages with NFC-enabled devices
- Label odometer
- Real-time clock

Printer Specifications

Resolution

203 dpi/8 dots per mm

Memory

128 MB RAM; 256 MB Flash (standard)

Print Width

4.1"/104 mm

Print Length

- Min.: 0.5"/12.7 mm
- Max.: 32"/813 mm

Print Speed

Up to 4"/102 mm per second

Media Sensors

Black mark and gap media sensing using fixed center-position sensors; label present sensor for issuing labels one at a time

Operating Characteristics

Environment

- Operating temperature: -4° F/-20° C to 122° F/50° C
- Storage/Transport temperature: -13° F/-25° C to 158° F/65° C
- Operating humidity: 10% to 90% non-condensing
- Storage humidity: 10% to 90% non-condensing

Agency Approvals

- Emissions: FCC Part 15, Subpart B, EN55022 Class-B, EN60950, EN55024 and VCCI class B
- Susceptibility: EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, and EN61000-4-5
- Safety: CE, UL, TÜV, CSA

Media Characteristics

Media Width

2.0"/51 mm to 4.4"/112 mm

Media Length

0.5"/12.7 mm to 32"/813 mm or continuous

Maximum Media Roll Size

2.6"/66 mm O.D. on a 0.75"/19 mm or 1.375"/34.9 mm I.D. core

Media Thickness

3.2 mil to 7.5 mil

Media Types

Die-cut labels and tags, linerless labels, receipt paper, black bar and gap sensing

Physical Characteristics

- Width: 6.5"/165 mm
- Height: 7.35"/187 mm with beltclip
- Depth: 3.25"/82.5 mm
- Weight: 2.45 lbs/1.1 kg with battery

Link-OS Solutions

Software Tools

- **Document Design**: Quickly design a customized print solution using your business data and Zebra's intuitive, plug-and-print design tools.
- **Device Integration**: Zebra offers apps and products designed to help you integrate Zebra devices into your existing systems.
- **Device Management**: Manage your print operations locally and globally with Zebra's suite of device management tools.
- **Developer Tools**: Provides you the tools you need to create your own apps, including documentation, source code, programming languages, templates and more.

Firmware

- CPCL, EPL and ZPL programming languages
- ZBI 2.x™—powerful programming language that lets printers run standalone applications, connect to peripherals, and much more

Fonts/Graphics/Symbologies

Fonts and Character Sets

- Standard Fonts: 25 bitmapped, 1 smooth, scalable (CG Triumvirate Bold Condensed**)
- Optional Fonts: downloadable bitmapped/scalable fonts
- International Character Sets (optional): Chinese 16 x 16 (traditional), 16 x 16 (simplified); Japanese 16 x 16, 24 x 24; Korean Mincho

CPCL Barcode Symbologies

- Barcode ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1
- Linear barcodes: Codabar (NW-7), Code 39, Code 93, Code 128, EAN-8, EAN-13, 2 and 5 digit add-on, Interleaved 2-of-5, UCC/EAN128, UPC-A, UPC-E, 2 and 5 digit add-on
- Two-Dimensional: Aztec, MSI/Plessey, FIM Postnet, Data Matrix, GS1 DataBar™ (RSS) family, MaxiCode, MicroPDF417, PDF417, QR Code, TLC39

Communication and Interface Capabilities

- ZebraNet 802.11a/b/g/n radio with support for:
  - WEP (PSK only), TKIP and AES encryption
  - WPA and WPA2
  - 802.1x (with WPA or WPA2 only)
  - EAP-FAST, EAP-TTLS, EAP-TLS, PEAP, LEAP
  - 802.11d and 802.11i
  - Simultaneous Bluetooth 3.0 dual radio
  - Wi-Fi Certification
  - Fast roaming using PMK caching, CCKM or Fast Session resumption
- Bluetooth 3.0 radio
  - Security modes 1 – 4
  - "Made for iPod/iPhone/iPad" certified
  - Key Bonding
  - 10/100 Ethernet support (via charging cradle)

Cabled Communications Specifications

- USB 2.0 full-speed interface (12Mbps)
- Mini-B connector with optional strain relief
- Serial interface: 14-pin RS-232C port for communication to terminal or other host up to 115.2Kbps

Options and Accessories

Charging Options

- Charge the battery inside the printer using:
  - AC adapter
  - Charging and Ethernet cradle
  - Vehicle cradle (DC power)
- Charge the battery outside the printer using:
  - Smart charger
  - Quad charger

Optional Features and Accessories

- Linerless printing (with silicone platen roller only)
- 8-18VDC power supply with cigarette lighter adapter
- ZBI 2.x
- Spare batteries
- AC adapter
- SC2 smart battery single charger
- Quad battery charger
- QLn4-EC charging and Ethernet cradle
- Shoulder strap
- Forklift mount accessories
  - Heavy-duty mount with fanfold tray
  - Plate for RAM-arm mounting
  - Cradle for easy attach/detach
  - DC converters for powering and charging from forklift batteries
- Hand strap
- Soft case (IP54 rating when used)
- Serial and USB cables with strain relief
- Forklift battery eliminator