DS4600 Series for Retail

The versatility your workforce needs

Today's shoppers don't want to wait in long lines at the checkout or returns desk. The DS4600 Series offers the versatility and scanning performance you need to keep transactions fast and lanes flowing smoothly throughout the whole store. This feature-rich family of corded and cordless scanners helps associates scan items of all sizes, read barcodes in nearly any condition and handle transactions of all kinds. There is a DS4600 Series model for every need in your store. Bulky items in a shopping cart, a customer's driver's license at the returns desk, a mobile coupon at checkout, tiny barcodes in the jewelry department, auxiliary handheld scanning at self-checkout — the DS4600 Series can handle it all. The increased efficiency shrinks lines and keeps customers coming back again and again. And Zebra DNA enhances every stage of your scanning journey, from setup and security to management and optimization. The DS4600 Series — more data capture versatility, more range and more innovation.



Resets the Bar for Versatility and Performance

Capture It All with the DS4600 Series

No matter what kind of data you need to capture in your store, the DS4600 Series is ready for the job. Scan 1D and 2D barcodes, whether they're printed on a label or displayed on a phone. Capture DotCode and dotted DataMatrix barcodes through cellophane, as well as the tiny and dense barcodes found on jewelry tags. Read wide barcodes on packages and cartons in the backroom. You can even collect data from IDs and travel documents using Optical Character Recognition (OCR), or parse driver's license information for age verification, returns monitoring, loyalty and credit card applications. The result? Superior value. You can deploy a single scanner family for virtually every scanning need across your store.

Superior "Can't Miss" Scanning Range

The DS4600-SR can capture UPC codes up to 28 in (71cm) away, enabling checkout associates and self-checkout users to easily reach heavy or bulky items at the bottom of the shopping cart. It's ideal for adding handheld scanning to a bioptic scanner, such as Zebra's MP72 Series, in high-volume checkout lanes.

Count On Zebra Performance to Keep Lines Moving

The 800 MHz microprocessor, high-resolution megapixel sensor and Zebra's exclusive PRZM Intelligent Imaging technology provide instant barcode capture on even the most challenging barcodes. An exclusive rear engine design enables the DS4600 Series to read wider barcodes at every distance, compared to other scanners with a similar field of view. As a result, associates can focus on your customers, rather than positioning items.

Day-in, Day-Out Dependability

The DS4600 Series is engineered for durability, inside and out. IP52 sealing protects against spills. An exclusive double-sealed optical system guards the critical optical components from dust and liquid — ensuring that the 'eye' of the scanner always captures the sharpest possible barcode image for fast, reliable decoding. The recessed scan window protects against smudges, dirt and scratches. And the scanner is built to survive multiple 6 ft (1.8m) drops to concrete and 2,000 tumbles in our punishing tumble test.

The DS4600 Series — the scanner that delivers more. More versatility. More data capture options. More range. More innovation.

For more information, visit www.zebra.com/ds4600

On-the-Fly Switching Between Handheld and Hands-Free
Simply place the scanner in the optional presentation stand or presentation cradle to automatically switch to hands-free mode; pick up the scanner for handheld mode — no setting changes required.

Flexible Feedback Modes That Work for Any Retail Environment
The DS4600 Series offers multiple feedback modes including a good decode LED that's visible from any position, a traditional beep tone with adjustable volume/frequency, and Zebra's Direct Decode Indicator that projects the illumination on the barcode.

Do More With Productivity-Enhancing Innovation

Enhance Inventory Management with GS1 Label Parsing
With Label Parse+, the DS4600 Series can instantly capture and parse GS1 label barcode data, enabling associates to capture expiration dates, lot number, manufacturing location and more.

Capture Multiple Barcodes With One Press of the Scan Trigger
With Multi-Code Data Formatting (MDF), the DS4600 Series can scan multiple barcodes with a single trigger pull and transmit only the barcodes you need, in the order your application expects.

Single Out One Barcode From Many
With Zebra's Preferred Symbol, the DS4600 Series can capture and output only the preferred barcode, so workers no longer have to waste time physically covering nearby barcodes before scanning.

Deactivate EAS Tags While Scanning
Optional EAS support, available on the DS4600-HD/HL, allows associates to deactivate Checkpoint EAS tags while scanning the price, boosting productivity and preventing erroneous alarms.

Streamline Data Collection With OCR
Support for OCR expedites the collection of data from ID cards and travel documents that may not have barcodes — speeding up checkout transactions in airport shops and other locations.

Capture Driver's License Data[1]
Cashiers can capture and parse data information on driver's licenses to automatically populate a loyalty or credit card application, verify age for restricted purchases, process a customer's return and more.

A Better Cordless Experience with Zebra

Full-Shift Power Your Workers Can Count On
The DS4678 supports over 50,000 scans in a single charge — that's more than 13 hours of continuous scanning.

Choice of Standard and Presentation Cradles
The Presentation Cradle provides convenient hands-free scanning and charges the battery during use. The Standard Cradle can sit on a desktop or be mounted on a wall or checkstand. Both cradles are cross-compatible with Zebra's DS8100 Series. And Zebra's Connect+ Contact technology assures reliable, corrosion-free charging over the life of the scanner.

Keep Track of Your Cordless Scanners
With Virtual Tether, you won't have to worry about a customer accidentally leaving self-checkout with a cordless scanner. Both the scanner and cradle alert when a scanner is taken beyond its range or left out of the cradle for a predefined length of time.

Eliminate Wireless Network Interference with Wi-Fi Friendly Mode
Zebra's exclusive Wi-Fi Friendly Mode ensures that cordless scanners won't interfere and disrupt your Wi-Fi network.

Industry-Preferred Management Tools

Effortless Deployment
The DS4600 Series couldn't be easier to setup. Right out of the box, the scanner is configured for the applications you use every day, while auto-host detect cables automatically select the right host interface — just plug in the scanner and you're ready to go.

Make Data-Driven Decisions Informed by Your Scanners
Zebra's IoT Connector is a fully automated real-time data collection tool that routes data from your scanners into your preferred IoT endpoint. By mining and analyzing the data, you can get the insights needed to make data-driven decisions in real time.

Up-to-the-Minute Insight into Every Aspect of Your Scanners
Remote Diagnostics automate the recording of scanner asset information, health and statistics, parameter settings and barcode data — giving you the information needed for troubleshooting, predictive fleet-wide trend analysis and more.

Zebra DNA — Set Up. Secure. Manage. Optimize.
With more than 50 years of field-proven innovation, Zebra knows the scanning journey better than other providers. That's why we've engineered Zebra DNA into all of our scanners. This suite of software tools provides constant visibility, increases uptime and gives you the flexibility to respond to changing needs. For example, 123Scan simplifies every step of deploying your scanners. With Advanced Data Formatting, you can easily create scanner data formatting rules to optimize your workflows and solve business problems. Powerful complimentary management software enables easy remote management. And much more.

Specifications

Physical Characteristics

Dimensions	Corded DS4608: 6.5 in H x 2.6 in W x 3.9 in D 16.5cm H x 6.7cm W x 9.8cm D Cordless DS4678: 6.6 in H x 2.6 in W x 4.2 in D 16.8cm H x 6.6cm W x 10.7cm D Standard Cradle: 2.8 in H x 3.3 in W x 8.3 in D 7.1cm H x 8.4cm W x 21.1cm D Presentation Cradle: 2.8 in H x 3.3 in W x 8.3 in D 7.1cm H x 8.4cm W x 21.1cm D
Weight	Corded: 5.7 oz (161.9g) Cordless: 7.9 oz (225g) Standard Cradle: 7.1 oz (201.3g) Presentation Cradle: 6.5 oz (184.3g)
Input Voltage Range	Corded: 4.5 to 5.5 VDC Host Powered; 4.5 to 5.5 VDC External Power Supply Standard/Presentation Cradle: 4.7 to 5.5 VDC Host Powered; 10.8 to 13.2 VDC External Power Supply
Operating Current at Nominal Voltage (5.0V)	Corded: 340 mA (typical) Standard/Presentation Cradle: 470 mA (typical) Standard USB; 743mA (typical) 12V
Standby Current (Idle) at Nominal Voltage (5.0V)	Corded: 150 mA (typical)
Color	Nova White (corded only), Twilight Black
Supported Host Interfaces	USB Certified, RS232, Keyboard Wedge, TGCS (IBM) 46XX over RS485
Keyboard Support	Supports over 90 international keyboards
TAA Compliance	Trade Agreement Act Compliant
Electronic Article Surveillance	Compatible with Checkpoint EAS deactivation system
User Indicators	Direct Decode Indicator, Good Decode LEDs, Rear view LEDs, Beeper (adjustable tone and volume)

Performance Characteristics

Light Source	Aiming Pattern: circular 617nm amber LED
Illumination	(2) 660nm red LEDs
Imager Field of View	31.6° H x 22.6° V nominal
Image Sensor	1280 x 800 pixels
Minimum Print Contrast	15% minimum reflective difference
Skew/Pitch/Roll Tolerance	+/- 60°, +/- 60°, 0°–360°

Imaging Characteristics

Graphics Format Support	Images can be exported as Bitmap, JPEG or TIFF
Image Quality	96PPI on an A4 document (DS4600-SR)

Utilities and Maintenance

123Scan	Programs scanner parameters, upgrades firmware, provides scanned barcode data and prints reports. www.zebra.com/123Scan
Scanner SDK	Generates a fully-featured scanner application, including documentation, drivers, test utilities and sample source code. www.zebra.com/windowssdk
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. www.zebra.com/sms

Regulatory

Environmental	2011/65/EU and EN 50581:2012 and EN IEC 63000:2018
Electrical Safety	UL 60950-1, second edition, CAN/CSA-C22.2 No. 60950-1-07. EN 60950-1:2006/A2:2013 IEC 60950-1:2005/A2:2013 IEC 62368-1 (ed.2); EN 62368-1:2014
LED Safety	IEC 62471:2006 (Ed.1.0); EN 62471:2008
EMI/RFI	FCC: 47 CFR Part 15, Subpart B, Class B; ICES-003 Issue 6, Class B; EN 55032, Class B; EN 55024 EN 55035; EN 60601-1-2:2015, IEC 60601-1-2:2014

Accessories

Gooseneck Intellistand, Cup, Standard Cradle, Presentation Cradle

DS4600-SR/DL Decode Ranges (Typical)[4]

Symbology/Resolution	Near/Far
Code 39: 3 mil	2.2 in to 5.4 in (5.6cm to 13.7cm)
Code 39: 5 mil	0.7 in to 11.0 in (1.8cm to 27.9cm)
Code 39: 20 mil	0 in to 44.0 in (0cm to 111.8cm)
Code 128: 5 mil	2.7 in to 5.4 in (6.9cm to 13.7cm)
PDF 417: 6.7 mil	1.3 in to 10.0 in (3.3cm to 25.4cm)
UPC: 13 mil (100%)	0 in to 28.0 in (0cm to 71.1cm)
DataMatrix: 10 mil	1.0 in to 11.5 in (2.5cm to 29.2cm)
QR: 20 mil	0 in to 17.5 in (0cm to 44.5cm)

DS4600-HD/HL Decode Ranges (Typical)4DS4600-HD/HL Decode Ranges (Typical)[4]

Symbology/Resolution	Near/Far
Code 39: 3 mil	1.3 in to 6.0 in (3.3cm to 15.2cm)
Code 39: 5 mil	0.1 in to 11.5 in (0.3cm to 29.2cm)

Markets and Applications

Retail

- Checkout scanning
- Mobile scanning: eCouponing/loyalty
- DL parsing: age verification, loyalty and credit applications
- Auxiliary handheld scanning to bioptic scanner in high-volume checkout lanes
- Cigarette and liquor tax verification
- Checkpoint EAS
- OCR/Passport reading
- Receiving
- Inventory
- Drive-thru

Hospitality

- Event/admission ticketing

Symbol Decode Capability[2]

1D	Code 39, Code 128, Code 93, Codabar/NW7, Code 1 1, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3of 5, GS1 DataBar, Base 32 (Italian Pharma)
2D	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Han Xin, Postal Codes, SecurPharm, DotCode, Dotted DataMatrix
OCR	OCR-A, OCR-B, MICR, US Currency
Minimum Element Resolution	Code 39–3.0 mil (DS4600-SR) DataMatrix–5.0 mil (DS4600-SR) Code 39–2.0 mil (DS4600-HD) DataMatrix–4.0 mil (DS4600-HD)

User Environment

Operating Temp.	+32.0F to +122.0F (0.0C to +50.0C)
Storage Temp.	-40.0F to +158.0F (-40.0C to +70.0C)
Humidity	5% to 95% RH, non-condensing
Drop Specification	Designed to withstand multiple drops at 6.0 ft (1.8m) to concrete
Tumble Specification	Designed to withstand 2,000 tumbles in 1.5 ft (0.5m) tumbler
Sealing	IP52
ESD	Scanner/Standard Cradle/Presentation Cradle: ESD per EN61000-4-2, +/-15 KV Air, +/-8 KV Direct, +/-8 KV Indirect
Ambient Light Immunity	0 to 10,000 foot candles/0 to 107,000 Lux

Radio Specifications (DS4678)

Bluetooth Radio	Standard Bluetooth Version 5.2 with BLE: Class 1 330 ft (100m) and Class 2 33 ft (10m), Serial Port and HID Profiles; adjustable power: Class 1: output power adjustable down from 2dbm in 8 steps; Class 2: output power adjustable down from 0dbm in 8 steps

Battery (DS4678)

Battery	Type: Li-Ion with asset reporting Capacity: 2,500 mAh\ Number of scans from full charge: 50,000[3] Charge times from empty to full: 2 hours 15 minutes over external 12V 4 hours 30 minutes over external 5V 3 hours over BC1.2 USB 7 hours 45 minutes over standard USB

DS4600-HD/HL Decode Ranges (Typical)4DS4600-HD/HL Decode Ranges (Typical)[4]

Code 39: 20 mil	0.6 in to 29.0 in (1.5cm to 73.7cm)
Code 128: 5 mil	1.7 in to 5.0 in (4.3cm to 12.7cm)
PDF 417: 6.7 mil	0.6 in to 9.3 in (1.5cm to 23.6cm)
UPC: 13 mil (100%)	0 in to 18.0 in (0cm to 45.7cm)
DataMatrix: 10 mil	0.2 in to 9.5 in (0.5cm to 24.1cm)
QR: 20 mil	0 in to 13.5 in (0 cm to 34.3cm)

Warranty

Subject to the terms of Zebra's hardware warranty statement, the DS4678 and the CR8178 are warranted against defects in workmanship and materials for a period of three years from the date of shipment. The DS4608 is warranted against defects in workmanship and materials for a period of five years from the date of shipment. For the complete Zebra hardware product warranty statement, please visit:
www.zebra.com/warranty

Recommended Services

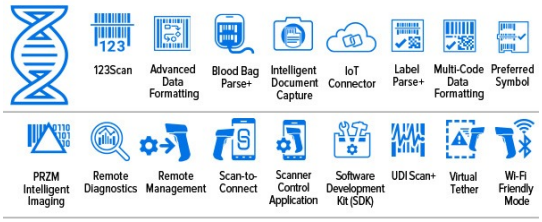
Zebra OneCare Select; Zebra OneCare Essential; Zebra OneCare Battery Maintenance

Footnotes

1. Available on DS4600-DL/HL models
2. Refer to Product Reference Guide for complete list of symbologies
3. At one scan per second
4. Printing resolution, contrast and ambient light dependentSpecifications are subject to change without notice.

Zebra DNA

Zebra DNA is a suite of highly intelligent firmware, software, utilities and apps exclusively engineered to ensure maximum performance from every Zebra scanner. For more information, please visit
www.zebra.com/zebradna



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