

# DS4600 Series for Healthcare

## The versatile healthcare scanner that does more for your whole hospital

Every second of every day, data capture plays a critical role throughout the hospital. NICU nurses scan an ankle bracelet to confirm a newborn's identity. Nurses scan IV bags to record time and dosage. Pharmacists scan a medication's barcode to cross-check it with the prescribed dosage. And lab technicians scan barcodes to carefully track specimens. With the DS4600 Series for Healthcare, you get a single solution for all of these data capture needs—and more. Designed for use throughout the whole hospital, the DS4608-HC can withstand constant disinfecting at the point-of-care and has an LED aimer that is safe for use in the NICU. This versatile scanner accurately and easily captures virtually every barcode type found throughout the hospital, and includes innovative features that further boost workflow efficiency and the patient experience. Zebra's unique DataCapture DNA and industry-preferred management tools make it easier than ever to integrate, deploy and manage your scanners. The DS4600 Series for Healthcare—the performance you need to improve the quality of care, the versatility you need to simplify your scanner deployment throughout the whole hospital.



### Scanning versatility for the whole hospital

#### Scan it all with virtually no exceptions

In hospitals, there is no room for error—that's why the DS4608-HC is packed with features that ensure instant and accurate first-time, every-time decoding of virtually any barcode found at the point-of-care, pharmacy and lab.

An 800 MHz microprocessor, high resolution megapixel sensor and Zebra's exclusive PRZM Intelligent Imaging technology combine to deliver unparalleled scanning performance on barcodes in any condition. The high density focus easily reads tiny and curved barcodes on medicine bottles, IV bags, syringes and more. And white illumination LEDs make it easy to scan barcodes on color-coded specimen trays and biopsy cassettes. This unmatched performance makes scanning easier than ever, enabling caregivers to focus on the patient, rather than the scanner.

#### Easy to sanitize—with the durability you need for daily use

Designed for use at the point-of-care, the DS4608-HC features a disinfectant-ready housing that can handle regular sanitizing with popular disinfectants. Screw holes and speaker holes are covered to mitigate the build up of bacteria. IP52 sealing protects against spills, while a patented double-sealed optical system protects the critical optical components from dust and liquid—ensuring that the 'eye' of the scanner always captures the sharpest possible barcode image for fast and reliable decoding. The recessed scan window protects against smudges, dirt and scratches, which can impact performance. And the scanner is built to survive multiple 6 ft./1.8 m drops to concrete and 2,000 tumbles in our punishing tumble test.

#### Flexible feedback modes—including night mode with vibrate

The DS4608-HC provides a feedback mode for every environment and situation.



**The DS4600 Series for Healthcare—the scanner that gives you more. More versatility, more performance and more innovation.**

For more information, visit [www.zebra.com/ds4600hc](http://www.zebra.com/ds4600hc)

Workers can choose between haptic/vibration, a good decode LED that's easy to see from any position, a traditional beep tone with adjustable volume and frequency, and Zebra's Direct Decode Indicator that projects the illumination on the barcode. In night mode, a quick press of the trigger toggles between an audible beep and vibration. Healthcare workers instantly know that a medicine vial, wristband or specimen sample was properly scanned—while disturbing patients as little as possible.

#### **Safe LED aimer is easy on the eyes**

Thanks to a highly visible and safe LED-based aimer, the DS4608-HC can be used throughout the hospital—including the NICU where the use of laser aimers is not advised.

#### **On-the-fly switching between handheld and hands-free scanning**

In the lab and pharmacy, some tasks may be better suited for handheld scanning and others for hands-free. With the DS4608-HC, switching modes is fast and easy. Simply place the scanner in the optional presentation stand to automatically switch to hands-free mode; then pick up the scanner for handheld mode. The result? Peak efficiency—your staff is free to use whichever mode is optimal for the task at hand.

### **Do more with productivity-enhancing innovations**

#### **Single out one barcode from many**

Zebra's Preferred Symbol simplifies and error-proofs data capture on blood bags and other items containing multiple barcodes. This innovative feature captures and outputs only the preferred barcode, so your busy healthcare staff no longer has to waste time physically covering nearby barcodes before scanning.

#### **Capture multiple barcodes with one press of the scan trigger**

With Multi-Code Data Formatting (MDF), the DS4608-HC can scan multiple barcodes with a single trigger pull and transmit only the barcodes you need, in the order your application expects.

## **Industry-preferred management tools**

#### **Effortless deployment**

The DS4608-HC couldn't be easier to setup. Right out of the box, the scanner is configured for the healthcare 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.

#### **Easily deploy and manage all of your scanners**

123Scan, a complimentary DataCapture DNA tool, is intuitive enough for first-time users. You can easily create configuration barcodes to program scanners, update firmware or stage a large number of devices. If your scanners are in multiple locations across the country or around the world, you can use the complimentary Scanner Management Service (SMS) to configure and update the firmware for any DS4600 Series device that is plugged into a host. No depot staging or user action is required—such as the scanning of a configuration barcode.

### **DataCapture DNA—transforming scanners from the inside**

#### **Simplify the entire scanning experience**

Hardware is just the start of what you need to maximize the value of your scanners. The DS4600 Series is powered by DataCapture DNA, a set of unique development, management, visibility and productivity tools. Leveraging Zebra's 50 years of innovation, DataCapture DNA turns Zebra scanners into powerful tools that lower your TCO and help workers get more done each day. Decrease development cycles with development tools. Dramatically simplify scanner deployments of any size with management tools. Get the remote analytics you need to keep scanners up and running with visibility tools. And reach new levels of productivity with innovations that streamline tasks.

# Specifications

## Physical Characteristics

Dimensions	6.5 in. H x 2.6 in. W x 3.9 in. D 16.5 cm H x 6.7 cm W x 9.8 cm D
Weight	5.7 oz. / 161.9 g
Input Voltage Range	4.5 to 5.5 VDC Host Powered; 4.5 to 5.5 VDC External Power Supply
Operating Current at Nominal Voltage (5.0V)	375 mA (typical)
Standby Current (Idle) at Nominal Voltage (5.0V)	150 mA (typical)
Color	Healthcare White
Supported Host Interfaces	USB, RS232, TGCS (IBM) 46XX over RS485
Keyboard Support	Supports over 90 international keyboards
User Indicators	Direct Decode Indicator, Good Decode LEDs, rear view LEDs, beeper (adjustable tone and volume), haptic/vibration

## Performance Characteristics

Light Source	Aiming Pattern: circular 528nm true green LED
Illumination	(2) warm white LED's
Imager Field of View	35° H x 22° V nominal
Image Sensor	1280 x 800 pixels
Minimum Print Contrast	15% minimum reflective difference
Skew Tolerance	+/- 60°
Pitch Tolerance	+/- 60°
Roll Tolerance	0° - 360°

## Imaging Characteristics

Graphics Format Support	Images can be exported as Bitmap, JPEG or TIFF
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## Environmental

Operating Temperature	32.0° to 122.0° F / 0.0° to 50.0° C
Storage Temperature	-40.0° to 158.0° F / -40.0° to 70.0° C
Humidity	5% to 95% RH, non-condensing
Drop Specification	Designed to withstand multiple drops at 6.0 ft./1.8 m to concrete
Tumble Specification	Designed to withstand 2,000 tumbles in 1.5 ft./0.5 m tumbler
Environmental Sealing	IP52

## 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

## Symbol Decode Capability

1D	Code 39, Code 128, Code 93, Codabar/NW7, Code 11, MSI Plessey, UPC/EAN, I 2 of 5, Korean 3 of 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
	Refer to Product Reference Guide for complete list of symbologies.
Minimum Element Resolution	Code 39 - 2.0 mil DataMatrix - 4.0 mil

## DS4608-HC Decode Ranges (Typical)<sup>1</sup>

Symbology/Resolution	Near/Far
Code 39: 3 mil	1.3 in./3.3 cm to 6.0 in./15.2 cm
Code 39: 5 mil	0.1 in./0.3 cm to 11.5 in./29.2 cm
Code 39: 20 mil	0.6 in./1.5 cm to 29.0 in./73.7 cm
Code 128: 5 mil	1.7 in./4.3 cm to 5.0 in./12.7 cm
PDF 417: 6.7 mil	0.6 in./1.5 cm to 9.3 in./23.6 cm
UPC: 13 mil (100%)	0 in./0 cm to 18.0 in./45.7 cm
DataMatrix: 10 mil	0.2 in./0.5 cm to 9.5 in./24.1 cm
QR: 20 mil	0 in./0 cm to 13.5 in./34.3 cm

## Warranty

Subject to the terms of Zebra's hardware warranty statement, 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](http://www.zebra.com/warranty)

## Markets and Applications

### Hospitals

- Medication administration
- Hospital Pharmacy: medication intake and inventory
- Hospital Laboratory: specimen track and trace
- Operating Room: surgical supply instruments and implants
- Patient identification and verification
- Patient admission: ER/triage/admissions
- Electronic record access

### Outpatient facilities

- Patient identification and verification
- Specimen track and trace

## Environmental

Approved Cleaners	Disinfectant Ready. Refer to the product reference guide for the complete list of approved cleaners.
Electrostatic Discharge (ESD)	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

## Recommended Services

Zebra OneCare™ Select; Zebra OneCare Essential

## Footnotes

1. Printing resolution, contrast and ambient light dependent

## DataCapture DNA

DataCapture DNA is a suite of highly intelligent firmware, software, utilities and apps exclusively engineered to add functionality and simplify the deployment and management of Zebra scanners. For more information about DataCapture DNA and its applications, please visit [www.zebra.com/datadecodedna](http://www.zebra.com/datadecodedna)

