

DS55 Series for Labs Fixed Mount Scanner

Proven scanning performance in a compact, fits anywhere design built for the lab

Purpose built for medical labs, pharmacies and patient admissions, the DS55 Series for Labs Fixed Mount Scanner enhances clinical workflows, reduces errors and improves patient safety. With a tiny footprint, the DS55 Series fits into the smallest of spaces, while its modern and wipeable design is ideal for many medical settings. Flexible mounting options, including support for third-party accessories, enable the DS55 Series to meet a wide range of applications. Zebra's proven scanning performance offers unparalleled productivity and ease of use, with flawless scanning of the many types of barcodes found in labs and pharmacies. Value-added tools seamlessly capture data from driver's licenses, blood bags and medical equipment to streamline and error-proof more workflows. And Zebra DNA ensures maximum performance year after year and makes it easier than ever to integrate, deploy and manage your scanners.



Purpose Built for Labs and Pharmacies

Give Every User a Better Scanning Experience

Both seasoned lab employees and incoming patients can count on first-time, every-time scanning with Zebra's Intelligent Imaging technology. A megapixel sensor delivers 184% higher resolution than the previous generation DS457 for superior performance on damaged and poorly printed barcodes. Fast swipe speeds ensure barcodes are captured as quickly as they're presented. A large, omni-directional field of view makes scanning easier than ever, as there's less need to carefully position barcodes for a successful scan.

Track Medications, Specimen Samples and More

The DS55 Series easily and accurately captures the many kinds of barcodes commonly used in pharmacies and labs — from smaller high density barcodes on microscope slides to curved barcodes on medicine vials and bags. White illumination LEDs make it easy to scan barcodes on color-coded specimen trays and biopsy cassettes.

Wipeable Housing is Easy to Clean

With IP54 sealing and a purpose-built design with no exposed openings, the DS55 Series allows for safe and frequent wipedowns — critical in lab and hospital settings.

Versatility Redefined — One Scanner Meets Multiple Needs

Fits in the Smallest of Spaces

The tiny DS55 Series is ideal wherever a zero or minimal footprint is required. At just 1.2 in H x 2.2 in W x 2.8 in D (3.0cm H x 5.6cm W x 7.2cm D), the scanner can be mounted just about anywhere — attached to a lab workstation or pharmacy register or under the admissions desk for a true zero footprint.

Easy Integration into Self-Service Solutions

The DS55 Series can be integrated into the most space-constrained solutions to bring world-class scanning performance to patient check-in kiosks, pharmacy workstations and more.



Integration into your product designs is easy. The scanner's compact, low profile design combined with multiple mounting options allow for a sleek, clean look. If you have a Zebra DS457 deployed today, the DS55 Series offers similar dimensions and matching mounting hole locations for an easy replacement.

All the Cables You Need

Multiple cable options — including 2 ft and 7 ft, straight and right-angle connectors — provide just the right fit for your particular needs.

Healthcare-Friendly Illumination and Aimer

Soft white illumination is easy on the eyes and the green LED aimer is easy to see in a variety of lighting conditions, making the DS55 Series a great fit for healthcare applications, including ones sensitive to red light sources or safety issues with laser aimers.

Instantly Capture and Process Driver's License Data

The DS55 Series can capture and parse data on driver's licenses to automatically populate patient admission forms for faster intakes.

Easily Capture UDI Information and Blood Bag Data

With Blood Bag Parse+, a single scan captures all the data required on every blood bag — including blood type, date of donation, donation location and expiration date. UDI Scan+ automatically parses and formats Unique Device Identification (UDI) information on medical device packaging, sending the right data in the right fields to your application.

Capture OCR, Images and Documents

The DS55 Series makes it easy to take high quality images of prescriptions, ID cards and more. Support for multiple OCR fonts streamlines and error-proofs data collection.

Flexible Mounting Options

Standard Mount Opens Up Virtually Limitless Possibilities

The DS55 Series features a standard ¼ - 20 camera mount for quick and easy mounting to a wide range of third-party accessories — clamps, poles, swivels, wall mounts and more. You can always find the right accessory for your specific need.

Triple Your Mounting Options with an Innovative 3-in-1 Mount

Zebra's new 3-in-1 mounting accessory is a computer display mount, wall mount and presentation stand all in one. The magnetic mounting face securely holds the DS55 Series in place, while letting the scanner swivel to either side as needed. It's easy to lift the scanner off to scan an item in handheld mode, then pop it back on.

Low Cost of Ownership

Designed to Survive Spills and Drops

The DS55 Series offers the durability needed to handle all-day, everyday use in your lab or pharmacy. It's built to withstand 5 ft (1.5m) drops to concrete and IP54 sealing protects against spills.

Superior Reliability

The DS55 Series is backed by a 3-year warranty. Since Zebra data capture products are proven to have less than 0.5% failure rates, you can be confident in the long-term reliability of your scanner.

Easy Application Development

Get everything you need to easily integrate scanning into your applications with our Scanner Software Development Kits (SDKs) for Windows, Android, iOS and Linux. These SDKs provide documentation, drivers, test utilities and sample source code.

Multi-Interface Flexibility

Every DS55 Series scanner supports both RS232 and USB to help future-proof your investment. If you migrate your host from RS232 to USB, you won't need to purchase new scanners. And the DS55 Series is USB Certified for worry-free integration.

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. The result? You can mine the data and get the insights needed to make 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 event verification, pilot site ROI generation, troubleshooting and fleet-wide trend analysis.

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 offers a patented configuration wizard that 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	1.2 in H x 2.2 in W x 2.8 in D (3.0cm H x 5.6cm W x 7.2cm D)
Weight	2.3 oz (65.2g)
Input Voltage Range	4.75 to 5.25 VDC Host Powered; 4.75 to 5.25 VDC External Power Supply
Operating Current at Nominal Voltage (average)	Presentation Mode: 360 mA RMS (Typical), Trigger Mode: 350 mA RMS (Typical)
Standby Current (Idle) at Nominal Voltage (average)	Presentation Mode: 185 mA RMS (Typical), Trigger Mode: 155 mA RMS (Typical)
Color	Alpine White
Supported Host Interfaces	USB, RS232
USB Certification	USB Certification
User Indicators	Good Decode LEDs, Speaker (adjustable tone and volume)

Performance Characteristics

Swipe Speed (Hands-Free)	Up to 100 in (254cm) per second for 13 mil UPC in optimized mode
Image Sensor	1280 x 800 pixels
Aiming pattern	Circular 525 nm True Green LED
Illumination	(1) Warm White LED
Imager Field of View	48° H x 30° V nominal
Minimum Print Contrast	15% minimum reflective difference
Skew Tolerance	+/- 60°
Pitch Tolerance	+/- 60°
Roll Tolerance	0°-360°

Imaging Characteristics

Graphics Format	Images can be exported as Bitmap, JPEG or TIFF
Image Quality	200 PPI on a 6.0 x 3.8 in. (15.2 x 9.5 cm) document @ 7.0 in. (17.8 cm)

User Environment

Operating Temperature	-4F to +122F (-20C to +50C)
Storage Temperature	-40F to +158F (-40C to +70C)
Humidity	5% to 95% RH, non-condensing
Environmental Sealing	IP54

Decode Ranges (Typical)¹

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Symbology/Reso lution	Near/Far
Code 39: 3 mil	Trigger Mode: 2.8 in to 5.6 in (7.1cm to 14.2cm) Presentation: 2.8 in to 5.6 in (7.1cm to 14.2cm)
Code 39: 4 mil	Trigger Mode: 2.4 in to 8.0 in (6.1cm to 20.3cm) Presentation: 2.4 in to 8.0 in (6.1cm to 20.3cm)
Code 39: 5 mil	Trigger Mode: 1.6 in to 10.0 in (4.1cm to 25.4cm) Presentation: 1.6 in to 9.0 in (4.1cm to 22.9cm)
Code 39: 7.5 mil	Trigger Mode: 2.1 in to 15.0 in (5.3cm to 38.1cm) Presentation: 2.2 in to 10.0 in (5.6cm to 25.4cm)
Code 39: 20 mil	Trigger Mode: 1.6 in to 35.9 in (4.1cm to 91.2cm) Presentation: 2.0 in to 18.0 in (5.1cm to 45.7cm)
Code 128: 3 mil	Trigger Mode: 2.9 in to 5.5 in (7.1cm to 14.0cm) Presentation: 2.9 in to 5.5 in (7.1cm to 14.0cm)
Code 128: 5 mil	Trigger Mode: 2.1 in to 9.6 in (5.3cm to 24.4cm) Presentation: 2.1 in to 8.5 in (5.3cm to 21.6cm)
PDF 417: 6.7 mil	Trigger Mode: 2.3 in to 9.9 in (5.8cm to 25.1cm) Presentation: 2.3 in to 8.9 in (5.8cm to 22.6cm)
UPC: 13 mil (100%)	Trigger Mode: 1.6 in to 24.7 in (4.1cm to 62.7cm) Presentation: 1.6 in to 14 in (4.1 cm to 35.6cm)
Data Matrix: 10 mil	Trigger Mode: 1.9 in to 10.8 in (4.8cm to 27.4cm) Presentation: 1.9 in to 9.5 in (4.8cm to 24.1cm)
QR: 20 mil	Trigger Mode: 0.9 in to 17.3 in (2.3cm to 43.9cm) Presentation: 0.9 in to 14.0 in (2.3cm to 35.6cm)

Accessories

Gooseneck Intellistand; 3-1 Mount (PC display mount, Presentation stand, Wall mount); supports third-party accessories that support a standard 1/4" - 20 mounting screw

Regulatory

Environmental	RoHS - EN IEC 63000:2018 Amendment 2015/863 WEEE RECAST 2012/19/EU China RoHS - SJ/T 11364 REACH - EC 1907/2006
Electrical Safety	EN 62368-1:2014/AC:2015 EN 62368-1:2014/A11:2017 IEC 62368-1:2014 EN IEC 62368-1:2020+A11:2020 IEC 62368-1:2018 UL 62368-1, third edition CAN/CSA-C22.2 No. 62368-1-19
LED Safety	EN 62471, IEC 62471 plus all amendments and all national deviations
EMI/RFI	FCC 47 CFR Part 15B, ICES-003, EN55032, EN55035, EN61000-6-2, EN60601-1-2,

Markets and Applications

Healthcare Environments

- Laboratory
- PharmacyPatient Admissions

Applications

- Specimen tracking Medication tracking
- Patient identification

User Environment

Drop Specification	Designed to withstand multiple drops at 5 ft (1.5m) to concrete
Approved Cleaners	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 107,600 Lux

Symbol Decode Capability

1D	All major 1D barcodes including 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	All major 2D barcodes including PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Han Xin, Postal Codes, SecurPharm
OCR	OCR-A, OCR-B, MICR, US Currency
Minimum Input Resolution	Code 39: 3.0 mil; Code 128: 3.0 mil; Data Matrix: 5.0 mil; QR Code: 5.0 mil
	Refer to Product Reference Guide for complete list of symbologies.

Regulatory

	IEC60601-1-2, VCCI, and SABS
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Utilities and Management

123Scan	Programs scanner parameters, upgrades firmware, displays scanned barcode data, scanning statistics, battery health, asset 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/scannersdkforwindows
Scanner Management Service (SMS)	Remotely manages your Zebra scanner and queries its asset information. www.zebra.com/sms

Warranty

Subject to the terms of Zebra's hardware warranty statement, the DS5502 is warranted against defects in workmanship and materials for a period of Three Years from the date of shipment. Complete Zebra hardware product warranty statement: www.zebra.com/warranty

Recommended Services

Zebra OneCare Select; Zebra OneCare Essential

Footnotes

1. Distance dependent on symbology type and size. Specifications 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 about Zebra DNA and its applications, please visit www.zebra.com/zebradna





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