PRODUCT SPEC SHEET
ZEBRA DS457 SERIES

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NEXT-GENERATION FIXED MOUNT IMAGER

GET HANDS-FREE CONVENIENCE AND EXTRAORDINARY SCANNING SPEED ON ANY BAR CODE...ON ANY SURFACE

Enable high-volume hands-free scanning from the retail POS and airport boarding gate to the manufacturing production line with the Zebra DS457. With comprehensive data capture, your workers can scan virtually any bar code — including 1-D, 2-D and direct part marks. No matter what type of bar code is presented, or whether it is printed on a paper label, etched into a product or displayed on a mobile phone screen, breakthrough digital imaging technology delivers extraordinary scanning speed. The tiny footprint fits in the most space constrained areas. Workers can choose presentation or trigger-activated mode, providing the flexibility for a wide variety of applications. And while the DS457 can be integrated into a wide variety of products, its sleek design is just as at home in customer-facing areas, such as a retail counter.

TRUE BEST-IN-CLASS PERFORMANCE ON ALL BAR CODES

With stunning performance on virtually every bar code — 1-D and 2-D plus direct part marks — your workers can capture bar codes as fast as they can present items for scanning. There is never a need to pause between scans, protecting productivity.

FITS IN THE SMALLEST OF SPACES

The tiny DS457 is ideal where a zero or minimal footprint is required. At just 1.15 in. H x 2.3 in. L x 2.44 in. W (2.92 cm H x 5.84 cm L x 6.2 cm W), this device can be mounted just about anywhere — attached to the register or under the counter for a true zero footprint on the retail cashwrap to a space-constrained manufacturing cell or airport gate.

SCAN BAR CODES ON PRACTICALLY ANY SURFACE — INCLUDING MOBILE PHONE DISPLAYS

Your customers are rapidly adopting mobile bar codes — electronic versions of tickets, boarding passes and loyalty cards that can be carried right in the mobile phone. Since the DS457 can read bar codes on mobile phone and computer displays, you're ready for this next generation bar code, protecting customer convenience, customer service quality and employee productivity.

FLEXIBLE AND EASY TO INTEGRATE

The DS457 can be used as a standalone scanner or integrated into the most space-constrained products to bring world-class scanning performance to mobile computers, handheld scanners, self-service kiosks, medical and diagnostic instruments, lottery terminals and more. Integration into your product designs is easy — there is no optical, mechanical or electrical engineering required. And in the event you already have a Zebra Miniscan deployed today, the common interface allows you to simply swap scanners to cost-effectively boost scanning performance and quality — no re-tooling or redesign of the installation area are required.

USERS ARE UP AND RUNNING IN MINUTES

Full omni-directional scanning eliminates the need to precisely align bar code and imager. A unique aiming pattern with a bright central dot ensures quick, accurate scanning — even in the brightest lighting. The result is a highly intuitive scanning function that increases worker productivity, virtually eliminating the need and cost associated with training.

FOUR MODELS TO MEET ANY APPLICATION NEED

No matter what type of bar codes you need to capture, there is a model that will meet your needs.

DS457-SR: Combination 1-D and 2-D bar code scanning. This standard range model is designed to meet the needs of a wide variety of applications, offering the largest working range possible on the largest variety of bar codes.

DS457-HD: Optimized for comprehensive 2-D bar code capture. We took the DS457-SR Standard Range model and optimized the focus functionality to accommodate the very tiny and dense 2-D bar codes frequently found in manufacturing. Electronic manufacturers can ensure the right part is used at the right time on the production line. And pharmaceutical manufacturers can track product as it is produced and packaged to meet track and trace regulations.

DS457-DL: Combination 1-D and 2-D bar code scanning plus driver's license parsing. We added driver's license parsing to the DS457-SR Standard Range model to enable the instant decoding of the bar coded information on any state driver's license in the U.S. as well as other national ID documents to support a wide variety of value-added applications. At

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Four models to meet any data capture need

SR (Standard Range) designed for 1-D/2-D intensive applications with medium to large bar codes

HD (High Density) for the tiny and dense codes common in manufacturing

DL (Driver's License parsing) ideal for 1-D/2-D applications that require the capture of U.S. driver's license ID information

DP (Direct Part Marks) for rapid capture of every type of direct part mark, including dot peen, laser etch, chemical etch, inkjet, mold, cast and thermal spray; capture marks on virtually any surface, including metal, rubber, plastic and glass

Scans any bar code on paper, mobile phones and computer displays

Scan virtually any bar code on any medium; supports the mobile bar codes your customers are embracing

Comprehensive data capture — 1-D, 2-D, and DPM codes, driver's license parsing, still images, video and OCR

Diverse series that can meet any fixed mount hands-free scanning need

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the retail POS, the DS457-DL allows effortless auto-population of credit and loyalty cards, as well as easy and error-proof age verification.

DS457-DP: Comprehensive support for 1-D and 2-D bar codes plus direct part marks. This powerful model starts with the high-density scanning capability of the DS457-HD, and adds new algorithms that ensure easy reading of anydirect part marks. Workers can easily capture even the most challenging direct part marks, including low-contrast marks printed on black plastic, black rubber, steel and cast-iron.

WORLD CLASS SUPPORT FOR MAXIMUM UPTIME

For true service peace of mind, our Service from the Start Advance Exchange Support program offers next-business-day device replacement to keep your DS457 imagers up and running. And since built-in Comprehensive Coverage includes normal wear and tear as well as accidental damage to internal and external components, unforeseen repair expenses are practically eliminated. The result is an extraordinary lifecycle, extraordinary uptime — and a truly outstanding ROI.

Put the Zebra DS457 to work in your organization today.

For more information, please visit us on the web at **www.zebra.com/ds457** or access our global contact directory at **www.zebra.com/contact**

SPECIFICATIONS CHART

PHYSICAL CHARACTERISTICS

Dimensions	1.15 in. H x 2.3 in. L x 2.44 in. W 2.92 cm H x 5.84 cm L x 6.2 cm W
Weight	3.9 oz./111 g
Power	Maximum: 5 VDC +/- 10% @ 450 mA
Models	DS457SR: 1-D and 2-D bar codes DS457HD: 1-D and 2-D bar codes, including high density codes DS457DL: 1-D and 2-D bar codes plus parsing of codes found on driver's licenses and other identification documents DS457DP: 1-D and 2-D bar codes plus direct part marks

PERFORMANCE CHARACTERISTICS

Sensor Resolution	752 (H) x 480 (V) gray scale
Imager Field of View	DS457 SR and DL: 39.6° horizontal, 25.7° vertical DS457 HD and DP: 38.4° horizontal, 24.9° vertical
Aiming Element	655 ± 10 nm (VLD)
Illumination Element	625 ± 5 nm (LED)
Minimum Print Contrast	Minimum 25% absolute dark/light reflectance

SYMBOLOGY DECODE CAPABILITY

1-D	All major 1-D bar codes
2-D	PDF417, DataMatrix, QR Code, Aztec, Composite Codes and MaxiCode

USER ENVIRONMENT

Operating Temp.	-4° to 122° F /-20° to 50° C* (NOTE: Laser aimer disabled above 113° F /45° C)
Storage Temp.	-40° to 158° F /-40° to 70° C
Humidity	Operating: 95% RH, non-condensing at 50°C Storage: 85% RH, non-condensing at 70°C
Sealing	IP54
Drop Specification	Withstands multiple 30 in./176 cm drops to concrete
Ambient Light	Total darkness to 9000 ft. candles (96,900 Lux)
Programmable Parameters	Power mode, trigger mode, beeper tone, session time, camera control, image control, advanced data formatting, document capture, signature capture
Image File Formats	BMP, TIFF, JPG

INTERFACES

Interfaces Supported	9-pin male D-sub - USB (full speed) and TTL level RS232 with RTS and CTS

REGULATORY

Electrical Safety	ETL, VDE, CETL, EN60950, Ctick, VCCI
Laser Classification	Intended for use in CDRH Class II/IEC 825 Class I devices
EMI/RFI	FCC Part 15 Class B, ICES-003 Class B, CISPR22 Class B

Powerful 624 MHz processor, fast sensor shutter speed and patent pending fastpulse illumination

Delivers extraordinary scanning speed on all bar codes; increases throughput and productivity

Tiny footprint

Fits almost anywhere; enables 'invisible' under the counter installation

Sleek design

Suitable for design conscious retail stores and other customer-facing areas

Mounting accessories

Easily mount wherever needed — on cash registers, under counters and more

Omni-directional scanning

No need to align bar code and scanner; improves ergonimics and user comfort

Unique aiming pattern

Bright central dot ensures quick, accurate scanning — even in bright sunlight

Scan trigger

Can be used in either presentation mode for hands-free scanning or on-demand scanning via integrated scan trigger

Supports 123Scan[2] configuration tool

Enables rapid and easy customized set-up through a free, wizard-based PC software tool

Compatible with SSI and SNAPI command interfaces

Postal	US Postnet, US Planet, UK Postal, Australian Postal, Japan Postal

Environmental	RoHS compliant

WARRANTY

Subject to the terms of Zebra's hardware warranty statement, the DS457 is warranted against defects in workmanship and materials for a period of 3 years from the date of shipment. For the complete Zebra hardware product warranty statement, go to: http://www.zebra.com/warranty

RECOMMENDED SERVICES

Customer Services	Service from the Start Advance Exchange Support

* See integration guide

Expands application flexibility with fast, simple communication plus support for advanced features between imager and host

Optional software developer kit (SDK)

Provides familiar Microsoft® Windows 2000 and XP platform support for rapid development of applications that integrate easily into the customer environment

MARKETS AND APPLICATIONS

Retail

POS, ID verification, mobile coupons and loyalty card scanning, auto-fill of credit and loyalty card applications

Manufacturing

Error proofing on clean conveyors in electronic manufacturing, track and trace in pharmaceutical manufacturing

Travel and Transportation

Scanning of mobile and paper-based boarding passes and tickets at airports, train stations and bus terminals

Security

Access control at border crossings, military bases and more

OEM

Integrate into a broad range of devices, from self-service kiosks to medical instruments

DS457 SERIES DECODE ZONE (TYPICAL)

Depth of Field

Label Density/Paper Label	DS457-SR / DS457-DL		DS457-HD / DS457-DP	
	English	Metric	English	Metric
Code 39 - 3 mil	Not Tested	Not Tested	1.2" - 4.8"	3.0 - 12.2 cm
Code 39 - 5 mil	1.3" - 8.1"	3.3 - 20.6 cm	1.1" - 5.7"	2.8 - 14.5 cm
Code 39 - 20 mil	1.8" - 16.5"	4.6 - 41.9 cm	1.9" - 9.7"	4.8 - 24.6 cm
UPC - 13 mil	1.5" - 15.3"	3.8 - 38.9 cm	1.7" - 8.3"	4.3 - 21.1 cm
Datamatrix - 4 mil	Not Tested	Not Tested	1.6" - 3.0"	4.1 - 7.6 cm
Datamatrix - 5 mil	Not Tested	Not Tested	1.4" - 3.7"	3.6 - 9.4 cm
Datamatrix - 7.5 mil	2.0" - 6.0"	5.1 - 15.2 cm	1.2" - 4.4"	3.0 - 11.2 cm
Datamatrix - 10 mil	1.5" - 8.4"	3.8 - 21.3 cm	Not Tested	Not Tested
Datamatrix - 15 mil	1.6" - 10.9"	4.1 - 27.7 cm	Not Tested	Not Tested
QR Code - 5 mil	Not Tested	Not Tested	1.5" - 3.1"	3.8 - 7.9 cm
QR Code - 7.5 mil	2.1" - 5.1"	5.3 - 13.0 cm	1.1" - 4.0"	2.8 - 10.2 cm
QR Code - 10 mil	1.5" - 7.0"	3.8 - 17.8 cm	1.1" - 4.6"	2.8 - 11.7 cm
PDF417 - 4 mil	Not Tested	Not Tested	1.4" - 3.8"	3.6 - 9.7 cm
PDF417 - 6.67 mil	1.8" - 7.1"	4.6 - 18.0 cm	1.0" - 4.8"	2.5 - 12.2 cm
PDF417 - 10 mil	1.2" - 10.2"	3.0 - 25.9 cm	Not Tested	Not Tested
PDF417 - 15 mil	1.5" - 13.0"	3.8 - 33.0 cm	Not Tested	Not Tested

Far end ranges will be reduced in motion enhancement modes.

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