::: ZEBRA

ZEBRA DS9808-R

NEXT-GENERATION HYBRID PRESENTATION IMAGER WITH INTEGRATED RFID

DEPLOY THE BEST OF ALL WORLDS FOR A TRULY FUTURE-PROOF AND COST- EFFECTIVE POS.

Zebra's DS9808-R is the first combination 1D/2D bar code scanner and RFID reader and the first combination handheld/ hands-free UHF RFID reader. Its revolutionary imaging engine enables the capture of 1D and 2D bar codes as well as images and signatures, with record swipe speeds on both 1D and 2D bar codes. In addition, the read range for RFID tags can be adjusted to suit the environment. For example, the RFID read range in presentation mode can be decreased to prevent inadvertent reading of RFID tags in a nearby cash-wrap, while the range in handheld (triggered) mode can be increased to read RFID tags that are further away. The DS9808-R offers the flexibility to accommodate virtually any type of data capture application, including support for: 1D and 2D paper and mobile bar codes, mobile coupons, mobile loyalty cards, mobile boarding passes, PDF417 bar codes, reading/writing* RFID tags

REALIZE THE BENEFITS OF ITEM-LEVEL RFID WITH THE LAST LINK IN THE RFID CHAIN

The DS9808-R complements Zebra's RFID portfolio, allowing retailers to implement RFID from the receiving dock to the POS. Retailers can realize the benefits of real-time item-level inventory visibility, including: timely re-ordering to eliminate out-of-stocks and associated lost sales, increased inventory turns and reduced inventory carrying costs, real-time trending analysis for better purchasing decisions, timely replenishment of your shelves with minimal human intervention.

RICH BEST-IN-CLASS RFID FUNCTIONALITY AT THE POS

The comprehensive RFID feature set enables retailers to maximize the value of RFID technology in the store. In addition to reading tags to complete purchases, capabilities include: Commission tags on new inventory items and returned goods. Built-in filtering prevents accidental multiple entries of the same tag - Associates will hear a single beep as the tag data is captured and entered into the transaction, just as if a bar code was scanned, providing associates with a familiar and intuitive process that eliminates the need for training. Special RFID data conversion software for on-the-fly translation of the RFID EPC tag data to UPC bar code data. A pilot test or full RFID solution can be implemented quickly, easily and cost-effectively into any existing retail technology environment.

MAXIMUM EASE OF USE FOR MAXIMUM THROUGHPUT

The DS9808-R allows associates to instantly switch scanning modes. Switching from hands-free presentation style scanning to handheld mode is as easy as picking up the device. The unique tri-function trigger design enables retailers to assign up to three specific functionalities in the same trigger. For example, the upper and lower triggers could activate the bar code reader and pressing both triggers together could activate the RFID reader.

MULTIPLE FUNCTIONS ON A SINGLE DEVICE OFFERS RAPID RETURN ON INVESTMENT (ROI)

With the flexible DS9808-R, there is no need to purchase multiple devices to support different types of data capture in your enterprise. The DS9808-R provides the functionality of an RFID reader/writer, an image capture device and a bar code scanner all in a single device. Capital and operational costs are significantly reduced, there are fewer devices to purchase and manage.

*Tag "write" commands are supported via USB only.

FEATURES

Innovative hybrid design

Truly designed for ease of use for both hands-free and handheld scanning; dynamically switches between modes

Multiple technologies, one device

The DS9808-R supports several technologies eliminating the need to purchase and maintain multiple devices. A single device supports a wide range of data capture applications including reading and writing* of RFID tags, decoding 1D, 2D and PDF417 symbologies and capturing images.

Omni-directional bar code scanning; wide working range, laser aiming pattern

Easy to use; no need to align item and scanner; virtually no training require

Withstands multiple 4 ft. /1.2 m drops to concrete

Designed to endure the rigors of everyday use for maximum reliability, uptime and a low total cost of ownership

Swipe speed programmable up to 100 inches/254 cm per second

Optimized scanning speed delivers robust performance and accurate capture of a wide variety of bar codes

Maximum flexibility and control

Independent RFID antenna power level controls for both hands-free and handheld operation help avoid inadvertent RFID tag reads; triggered operation in handheld

For more information on the DS9808-R hybrid presentation imager, please visit us on the web at **www.zebra.com/ds9808-R** or access our global contact directory at **www.zebra.com/contact**

mode offers unmatched control for reading RFID tags at the POS

Integrated compact base

Requires very little real estate, enabling easy deployment in even the most space constrained cash wraps

SPECIFICATIONS CHART

PHYSICAL CHARACTERISTIC

Dimensions	8.5 in. (max) H x 3.5 in. W x 6 in. D 21.6 cm (max) H x 8.9 cm W x 15.2 cm D
Weight	16.4 oz/465 g
Voltage and Current	Nominal: 5V ±5% VDC @ 1.2 A
Data Capture Options	1D/2D bar codes and RFID tags
Color	Twilight Black

SYMBOLOGY DECODE CAPABILITY

1D	UPC/EAN, Code 11, Code 39, Code 128, Code 93, Codabar/NW7, MSI Plessey, I 2 of 5, Korean 3 of 5, GS1 DataBar, Base 32 (Italian Pharma), PDF417, Micro PDF417, Composite Codes, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Postal Codes Refer to Product Reference Guide for complete list of symbologies.
PDF417 (and variants) :	PDF417 (Standard, Macro), MicroPDF417 (Standard, Macro), Composite Codes (CC-A, CC-B, CC-C)
2D	TLC-39, Aztec (Standard, Inverse), MaxiCode, DataMatrix/ECC 200 (Standard, Inverse), QR Code (Standard, Inverse, Micro)
Postal	U.S. Postnet and Planet, U.K. Post, Japan Post, Australian Post, Netherlands KIX Code, Royal Mail 4 State Customer, UPU FICS 4 State Postal, USPS 4CB, Canadian Post (Postbar)
Nominal Working Range (Handheld):	See chart on back
Nominal Working Range (Hands-free):	See chart on back
Minimum Resolution	Code 39 – 4 mil, UPC – 7.8 mil (60%) , PDF417 – 5 mil, Datamatrix – 5 mil

IMAGING CHARACTERISTICS

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

PERFORMANCE CHARACTERISTICS

*DS9808-SR, DS9808-LR, DS9808-DL** and DS9808-LL** Imager Mode*

Light Source	Aiming Pattern: 650nm laser diode Illumination: 630nm LED
Imager Field of View	39° H x 25° V
Roll/Pitch/Yaw	360°, ±65°, ±60°
Swipe Speed	Programmable up to 100 in./254 cm per second (Horizontal Read Rate)
Frame Rate	Up to 60 frames per second

*DS9808-LR and DS9808-LL** Laser Scanner Mode*

Light Source	650nm LED
Scan Angle	40° ±3° nominal

** Available in the US only.

RFID

Frequency	902 - 928 MHz: U.S., Canada, Mexico, Columbia, El Salvador, Guatemala
	865.6 - 867.6 MHz: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark ,Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia , Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom,
	902 - 907.5 MHz / 915 - 928 MHz: Brazil
	865 - 868 MHz / 920 - 925 MHz: Hong Kong, Singapore
	Other countries are pending. Please contact your local Zebra sales representative for availability in your region.
Tag Type	EPCglobal Class 1 Gen 2 (ISO 18000-6C)
Read Range/RF Power	Adjustable from near contact up to 40

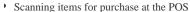| Image Transfer Speed	USB 2.0: Up to 12 Megabits/second RS-232: Up to 115 kb/second
Image Transfer Time	Typical USB application is ~0.2 seconds with a compressed JPEG of 100kb
Image Quality	120 DPI on a 4 x 6 in./10.2 x 15.2 cm document @ 6.5 in./16.5 cm

INTERFACES

Interfaces Supported	USB, RS-232, RS-485* (Port 9B, Port 5B) (*Tag "write" commands are not supported via RS-485)

WARRANTY

Subject to the terms of Zebra's hardware warranty statement, the DS9808 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

PRODUCT AVAILABILITY

Currently available in Austria, Belgium, Brazil, Bulgaria, Canada, Colombia, Cyprus, Czech Republic, Denmark, El Salvador, Estonia, Finland, France, Germany, Greece, Guatemala, Hong Kong, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Mexico, Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States. Other countries are pending. Please contact your local Zebra representative for availability in your region.

NOMINAL WORKING RANGE (HANDS-FREE):

DS9808-SR, DS9808-LR, DS9808-DL and DS9808-LL****

Code 39 – 5 mil:	0 – 4.5 in. (0 – 11.4 cm)
UPC/EAN – 10 mil (80%):	0 – 7.0 in. (0 – 17.8 cm)
UPC/EAN – 13 mil (100%):	0 – 8.0 in. (0 – 20.3 cm)
PDF417 – 6.6 mil:	0 – 4.5 in. (0 – 11.4 cm)
Datamatrix – 10 mil:	0 – 4.5 in. (0 – 11.4 cm)

** Available in the US only.

inches/1 m depending on tag sensitivity and orientation

USER ENVIRONMENT

Operating Temp.	32° to 104° F /0° to 40° C
Humidity	5% to 95% RH (Non-Condensing)
Drop Specification	Withstands multiple 4 ft./1.2 m drops to concrete
Ambient Light Immunity	Incandescent – 150 ft. candles (1,600 Lux) Sunlight – 8,000 ft. candles (86,000 Lux) Fluorescent – 150 ft. candles (1,600 Lux) Mercury Vapor – 150 ft. candles (1,600 Lux) Sodium Vapor – 150 ft. candles (1,600 Lux) Immune to normal or artificial light

REGULATORY

Electrical Safety	UL60950-1; CSA C22.2 No. 60950-1; IEC60950-1
Laser Safety	IEC 60825-1; 21CFR1040.10; CDRH Class II; IEC Class 2
EMI/RFI	FCC Part 15 Class B; Canada RSS-210; ICES-003 Class B
RF Exposure	FCC 47CFR Part 2, OET Bulletin 65 Supplement C
Environmental	Compliant with RoHS directive 2002/95/EEC
Regulatory Model Numbers	DS9808-RUS – US Version DS9808-RWW – Worldwide (Non-US) version

RECOMMENDED SERVICES

Customer Services	Service from the Start Advance Exchange Support

NOMINAL WORKING RANGE (HANDHELD):

DS9808-LR and DS9808-LL**

Code 39 – 5 mil:	0 – 5.0 in. (0 – 12.7 cm)
UPC/EAN – 10 mil (80%):	0 – 13.5 in. (0 – 34.3 cm)
UPC/EAN – 13 mil (100%):	0 – 18 in. (0 – 45.7 cm)

DS9808-SR and DS9808-DL**

Code 39 – 5 mil:	0 – 4.5 in. (0 – 11.4 cm)

UPC/EAN – 10 mil (80%):	0 – 8.5 in. (0 – 21.6 cm)
UPC/EAN – 13 mil (100%):	0 – 10.5 in. (0 – 26.7 cm)
DS9808-SR, DS9808-LR, DS9808-DL** and DS9808-DL**	
PDF417 – 6.6 mil:	0 – 5.0 in. (0 – 12.7 cm)
Datamatrix – 10 mil:	0 – 6.0 in. (0 – 15.2 cm)

** Available in the US only.

ONE MULTI-FUNCTION SCANNER...MANY USES

The DS9808-R can be utilized in many different industries and many different applications, including:
RETAIL

- Scanning items for purchase at the POS
- Beyond POS: Price checking, new inventory commission, separated inventory identification (e.g. fitting rooms), and returns processing
- RFID serialization protects against return attempts on items that were not purchased as well as items that were purchased at competing chains
- Commission RFID tags at point of manufacture or for stocking in store-level deployments
- Back-room price checking
- Return To Vendor (RTV) applications (old, damaged, mismatched product going back for credit)

ASSET MANAGEMENT
- Commissioning assets into an RFID Asset Management application

HOSPITALITY/LOYALTY
- Membership Identification

GOVERNMENT/TRANSPORTATION
- Proof of Identity

HEALTHCARE
- Medication check-in, receiving or dispensation

PHARMACIES
- Check-in, receiving or dispensation at bottom-level, box level or item level RFID-tagged drugs and medication

LIBRARIES
- Check-in, self checkout and auto-sorting

LAW, INSURANCE AND GENERAL OFFICE ENVIRONMENTS:
ENTERPRISE FILE/DOCUMENT TRACKING

Real-time tracking of files and folders on desks and in boxes, containers, or reusable totes
- Cost-effective archiving and timely access/inquiries
- Compliance with regulatory requirements
- Automate monitoring of check-out time limitations and delinquent returns
- Automated alerts for unauthorized access

ZEBRA TECHNOLOGIES