

# UHF | RAIN - POS Scanner Zebra - DS9908(r)

- RAIN RFID (UHF EPC Class1 Gen2, ISO 18000-63) compliant
- Google ARCore certified
- 5G, WiFi, Bluetooth 5.2, GPS
- Up to 1,5 m reading range
- IP65 protection



## UHF | RAIN - POS Scanner All-in-one enterprise mobile

The point of sale is your last opportunity to make a good impression. With the DS9900 Series, you can give shoppers the checkout experience they expect — short lines, a speedy transaction and attentive service. A one-of-a-kind hybrid design provides maximum flexibility, offering both handheld and hands-free scanning. While other products are handheld scanners retrofitted with a base, Zebra's award-winning Industrial Design team created the DS9900 Series from the ground up for both handheld and hands-free use. You get Zebra's industry-leading scanning technology, seamless switching between modes and superior ease of use, along with a wide range of innovative features that boost productivity.

An RFID model combines a barcode scanner and RFID reader to extend the benefits of RFID to your point of sale. Empower your checkout stands with the DS9900 Series Hybrid Presentation Imager - the ultimate in performance and design.

The DS9900 Series combines an 800 MHz microprocessor, a high-resolution megapixel sensor and Zebra's exclusive PRZM Intelligent Imaging technology for unparalleled performance on 1D, 2D and Digimarc® barcodes. Problematic barcodes won't slow down your checkout lanes. The DS9900 Series can instantly capture dense, poorly printed, damaged, crinkled, faded, distorted, low-contrast, and glossy printed barcodes, as well as electronic barcodes on dimly lit mobile phone displays.

#### Common Applications

- Checkout scanning
- Mobile payments, coupons and loyalty
- Checkpoint EAS
- Patient admissions
- Inventory management





### TECHNICAL SPECIFICATIONS

Physical Characteristics	
Dimension	DS9908: 20.3 cm H x 9.4 cm W x 13.2 cm DS9908R: 20.3 cm H x 9.9 cm W x 14.6 cm
Weight	DS9908: 330.0 g DS9908R: 420.0 g
Input Voltage Range	4.5 to 5.5 VDC Host Powered; 4.5 to 5.5 VDC External Power Supply
Current	Operating current at nominal voltage (5.0V): DS9908: 321 mA (typical) DS9908R: 400 mA (typical) Standby current (idle) at nominal voltage (5.0V): DS9908: 70 mA (typical) DS9908R: 135 mA (typical)
Color	Midnight Black (DS9908HD: Alpine white)
Supported Host Interfaces	USB Certified <sup>3</sup> , RS232, Keyboard Wedge, TGCS (IBM) 46XX over RS485
Keyboard Support	Supports over 90 international keyboards
TAA Compliance	Trade Agreement Act Compliant
User Indicators	Direct Decode Indicator, Good Decode LEDs, Speaker (adjustable tone and volume)

Performance Characteristics	
Swipe Speed (Hands-Free)	Up to 610 cm per second for 13 mil UPC in optimized mode
Light Source	Aiming Pattern: Circular 528nm green LED
Illumination	(2) warm white LEDs
Imager Field of View	48° H x 30.6° V nominal
Image Sensor	1280 x 800 pixels
Minimum Print Contrast	16% minimum reflective difference
Skew Tolerance	+/- 60°
Pitch Tolerance	+/- 60°
Roll Tolerance	0° - 360°

Environmental	
Operating Temperature	0.0° to 50.0°C
Storage Temperature	-40.0° to 70.0°C
Humidity	5% to 95% RH, non-condensing
Drop Specification	DS9908: Designed to withstand multiple drops at 1.5 m to concrete DS9908R: Designed to withstand multiple drops at 1.2 m to concrete
Tumble Specification	Designed to withstand 2,000 tumbles in 0.5 m tumbler
Environmental Sealing	DS9908: IP52 DS9908R: IP42
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

Regulatory	
Environmental	EN 50581:2012
Electrical Safety	IEC 62368-1 (ed.2) EN 62368-1:2014/AC:2015
LED Safety	IEC 62471:2006 (Ed.1.0) EN 62471:2008 (LED)
EMI/RFI	EN 55032:2012/AC:2013 (Class B) EN 55032:2015/AC:2016 (Class B) EN 55024:2010 EN 55024:2010/A1:2015 EN 55035:2017 EN 61000-3-2:2014 (Class A) EN 61000-3-3:2013 47 CFR Part 15, Subpart B, Class B ICES-003 Issue 6, Class B



### TECHNICAL SPECIFICATIONS

**Imaging Characteristics** 

RFID (DS9908R)	
Standards Supported	EPC Class 1 Gen2; EPC Gen2 V2; ISO-18000-63
RFID Engine	Zebra Proprietary Radio Technology
Nominal Read Range	~45.7 cm
RFID Power Output	3 dBm to 22 dBm
Frequency Range	US: 902 - 928 MHz EU: 865 - 868 MHz Japan: 916 - 923 MHz

Graphics Format Support	Images can be exported as Bitmap, JPEG or TIFF
Image Quality (A4 Document)	116 PPI on an 21.0 x 29.7 cm document @ 20.3 cm

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 (ItalianPharma)
2D	PDF417, Micro PDF417, Composite Codes, TLC-39, Aztec, DataMatrix, MaxiCode, QR Code, Micro QR, Han Xin, Postal Codes
OCR	OCR-A, OCR-B, MICR, US Currency
Minimum Element Resolution	Code 39 - 3.0 mil  Code 128 - 3.0 mil*  DataMatrix - 5.0 mil  QR Code - 5.0 mil  * with Decode Pagga Limit foature disabled

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

Part No. / Model	
	Zebra - DS9908 (DS9908-SR00004ZZWW)
	Zebra - DS9908R (DS9908-SRR0004ZZEU)
	Zebra - DS9908-HD (DS9908-HD4000WZZWW)