



# DS9808

Next-generation hybrid presentation imager



## FEATURES

### Innovative hybrid design

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

### Comprehensive data

**capture: 1D, 2D and PDF417 symbologies; image capture; signature capture and RFID**  
Delivers application flexibility; eliminates need for multiple devices — and associated costs; future proof — built-in support for the applications of tomorrow

### Innovative combination scanner offers the best of all worlds

Achieve a new level of productivity and throughput at the checkout stand — with the DS9808. The groundbreaking DS9808 is designed inside and outside to bring a new level of versatility, functionality and performance to the checkout stand. Outside, the DS9808 offers an extraordinary one-of-a-kind hybrid form factor by marrying a solid base with our advanced handheld ergonomics, creating a scanner that is truly designed to deliver superior comfort and ease of use in both handheld and hands-free scanning modes. The integrated base requires very little real estate at the point of sale — ideal for space constrained checkout stands. Inside, the DS9808 offers the very latest in scanning technology, delivering record swipe speeds for 1D and 2D bar codes, as well as the ability to capture images and signatures. When it comes to scanning distance, the DS9808 sets a new level of flexibility. The handheld decode range on the standard range (SR) model can scan up to 10.5 inches/26.7 cm

away; the long range (LR) model can scan up to 18 inches/45.7 cm away — ideal for retail stores with a mix of merchandise that includes bulky or heavy items that should remain in the cart. Additionally the hands-free decode range in both models can be adjusted to meet your needs — for example, to match the EAS deactivation range or prevent inadvertent scanning of items in space constricted cash-wraps.

### The performance you need to maximize productivity — and value

The DS9808 has what it takes to keep the checkout lines moving, enhancing customer satisfaction and sales. A swipe speed programmable up to 100 inches/254 cm per second provides rapid fire scanning — a must in busy environments. With omni-directional scanning, there is no need to take the time to orient bar code and scanner. The ability to capture virtually any 1D or 2D bar code quickly and easily eliminates the need for checkers to manually enter a UPC code. The ergonomically positioned

**EAS compatible**

Enables automatic deactivation of EAS security tags

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

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

**Withstands multiple 5 ft./1.5m drops to concrete**

Designed to endure the rigors of everyday use for maximum reliability and 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

**Flexible working range**

Two models to best meet your working range requirements: the DS9808-SR, which offers a handheld decode range of up to 10.5 in./26.7 cm; and the DS9808-LR, which offers a handheld decode range of up to 18 in./45.7 cm

**Supports RSM (Remote Scanner Management)**

Lowers IT expenses and TCO by enabling remote management from a central location

trigger enables easy and comfortable scanning in handheld mode. A specially designed laser-generated aiming pattern offers a clear and bright field of view even in bright sunlight, ensuring first time accurate aim. The extra loud beeper provides audible verification of an accurate scan in even the busiest retail environments. And a single swipe can simultaneously scan the price and deactivate an EAS tag, further protecting productivity at the checkout stand — and preventing erroneous alarms that embarrass customers and waste security staff time.

**Reduce costs and increase sales with the applications of today...and tomorrow**

The adaptable DS9808 is ideal in a wide variety of retail operations, as well as in a wide variety of areas within a retail store. For countries that utilize a PDF417 bar code on a national ID card or drivers' license, embedded and server-based parsing agents enable decoding with very little effort. The parsing is executed either in the scanner or the host, enabling department, specialty and convenience stores as well as pharmacies to implement a wide range of applications that can improve productivity, customer service, customer retention and sales while reducing fraud and theft. For example, a quick scan can instantly and accurately auto-populate a credit or loyalty card application, reducing processing time yet increasing your base of loyal customers. Pharmacies can quickly scan a driver's license to meet compliance regulations for the purchase of certain over-the-counter and prescription medications, enabling efficient and cost-effective electronic recordkeeping. Retailers who sell items with age restrictions can prevent unlawful transactions with a quick scan of a driver's license for automatic age verification. At the returns desk, a quick scan of a driver's license or other ID card helps retailers who do not require receipts to better prevent fraudulent returns. Support for an optional RFID module (available on the LR model) enables your retail operation to embrace the benefits of RFID now or in the future.

**Durable design for a low total cost of ownership**

The DS9808 offers a new standard for bar code scanner reliability, providing the maximum uptime required in the demanding retail environment. The 5 ft./1.5 m drop to concrete drop specification ensures dependable performance — in spite of the inevitable everyday drops and bumps.

**Rapid return on investment (ROI)**

With the flexible DS9808, there is no need to purchase multiple devices to enable different types of data capture in your enterprise — no matter what applications you need now or in the future, the powerful comprehensive feature set will meet your needs. You enjoy the functionality of an image capture device, a bar code scanner, an EAS tag deactivator and an RFID reader — all in a single device. Capital and operational costs are significantly reduced — there are fewer devices to purchase and manage, and compatibility with Remote Scanner Management (RSM) enables remote configuration, deployment and day-to-day management of the devices. And for true service peace of mind, Motorola recommends Service from the Start Advance Exchange Support. This multi-year coverage plan provides the next-business-day device replacement you need to keep your business running smoothly and productively. Your DS9808 will also be protected from the unexpected with built-in Comprehensive Coverage, which covers internal and external components damaged through accidental breakage. The result is an extraordinary lifecycle, extraordinary uptime — and a truly outstanding ROI.

For more information on the Symbol DS9808, access our global contact directory at [www.motorola.com/enterprisemobility/contactus](http://www.motorola.com/enterprisemobility/contactus) or visit [www.motorola.com/ds9808](http://www.motorola.com/ds9808)



# DS9808 Specifications

## Physical Characteristics

Dimensions:	8 in. (max) H x 5.4 in. L x 3.4 in. W 20.3 cm (max) H x 13.7 cm L x 8.6 cm W
Weight:	12 oz./340 g
Voltage and Current:	Nominal (without optional RFID module): 5 ±10%VDC @ 450 mA Nominal (with optional RFID module): 5 ±10%VDC @ 1.2 A
Color:	Twilight Black

## Performance Characteristics

### DS9808-SR and DS9808-LR. 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)

### DS9808-LR. Laser scanner mode

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

## Symbology Decode Capability

1-D:	UPC/EAN (UPCA/UPCE/UPCE1/EAN-8/EAN-13/JAN-8/JAN-13 plus supplementals, ISBN (Bookland), ISSN, Coupon Code), Code 39 (Standard, Full ASCII, Trioptic), Code 128 (Standard, Full ASCII, UCC/EAN-128, ISBT-128 Concatenated), Code 93, Codabar/NW7, Code 11 (Standard, Matrix 2 of 5), MSI Plessey, I 2 of 5 (Interleaved 2 of 5 / ITF, Discrete 2 of 5, IATA, Chinese 2 of 5), GS1 DataBar (Omnidirectional, Truncated, Stacked, Stacked Omnidirectional, Limited, Expanded, Expanded Stacked, Inverse), Base 32 (Italian PharmacoCode)
PDF417 (and variants):	PDF417 (Standard, Macro), MicroPDF417 (Standard, Macro), Composite Codes (CC-A, CC-B, CC-C)
2-D:	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
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
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

## User Environment

Operating Temperature:	32° to 104° F / 0° to 40° C
Humidity:	5% to 95% RH (Non-Condensing)
Drop Specification:	Withstands multiple 5 ft./1.5m 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

## Interfaces

Interfaces Supported:	USB, RS-232, RS-485 (IBM 46xx Protocols), Keyboard Wedge, Synapse
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## Regulatory

Electrical Safety:	UL6950-1, CSA C22.2 No. 60950-1, EN60950-1 / IEC60950-1
Laser Safety:	EN 60825-1, IEC 60825-1, 21CFR1040.10, CDRH Class II, IEC Class 2
EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B, EN 55022, EN 55024 AS/NZS 4268:2008, Japan VCCI
Environmental:	Compliant with RoHS directive 2002/95/EEC

## Options

Electronic Article Surveillance:	Compatible with Checkpoint EAS deactivation systems
Accessories:	Wall Mount Bracket; RFID Module (available for DS9808-LR model only) — planned for H2 2009
RFID Tags:	Gen2 UHF (With optional RFID module – for use on DS9808-LR model only – planned for H2 2009)

## Warranty

Subject to the terms of Motorola'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 Motorola hardware product warranty statement, go to: <http://www.motorola.com/warranty>

## Recommended Services

Customer Services:	Service from the Start Advance Exchange Support
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### Multiple on-board interfaces; universal cable compatible

Easy to install; future proof design easily connects to the hosts of today and tomorrow

### Extra loud beeper

Audible in the loudest environments

### Extra large LED indicator

Clearly visible from all scanning positions

### Rubberized handle

Provides workers with a comfortable, sure grip

### Recessed connector in the base

Minimizes the scanner footprint

See charts on back...

## PRELIMINARY SPECIFICATION SHEET

DS9808

Next-generation hybrid presentation imager

### Nominal Working Range (Handheld):

#### DS9808-LR

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

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-LR / DS9808-SR

PDF417 – 6.6 mil:	0 – 5.0 in (0 – 12.7 cm)
Datamatrix – 10 mil:	0 – 6.0 in (0 – 15.2 cm)

### Nominal Working Range (Hands-free):

#### DS9808-LR / DS9808-SR

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)

Note: The decode range in hands-free mode is programmable and can be limited to 6.5 inches (16.5 cm) for UPC/EAN – 13 mil bar codes, if desired.



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