



# MOTOROLA DS9808

## NEXT-GENERATION HYBRID PRESENTATION IMAGER

### INNOVATIVE COMBINATION SCANNER OFFERS THE BEST OF ALL WORLDS

Achieve a new level of productivity and throughput at the checkout stand with the DS9808 from Motorola. This groundbreaking scanner is designed from the inside out 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 that marries a solid base with our advanced handheld ergonomics. The result? 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. And 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.

### FLEXIBLE SCANNING RANGE

When it comes to scanning distance, the DS9808 sets a new level of flexibility. The standard range (SR) model can scan up to 10.5 in./26.7 cm away in handheld mode, while the long range (LR) model can scan up to 18 in./45.7 cm away — ideal when merchandise is too heavy or bulky to easily move out of the customer's 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 to prevent the 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 your checkout lines moving, improving both customer satisfaction and sales. A swipe speed programmable up to 100 in./254 cm per second provides rapid fire scanning — a must in busy environments. With omnidirectional scanning, there is no need to take the time to orient bar code and scanner. And since the DS9808 can capture 1D and 2D bar codes on paper labels as well as mobile phone displays, your checkers no longer need to manually enter UPC codes. The ergonomically positioned trigger provides 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 boosting productivity at the checkout stand — and preventing those erroneous alarms that embarrass your customers and waste security staff time.

## 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 their associated costs; future proof — built-in support for the applications of tomorrow

### EAS compatible

Automatically deactivates EAS security tags

### Omnidirectional 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./1.5 m drops  
to concrete**

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

**Swipe speed  
programmable up to  
100 in./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 application needs: 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 with remote management from a central location

**REDUCE COSTS AND INCREASE SALES  
WITH THE APPLICATIONS OF TODAY...  
AND TOMORROW**

The adaptable DS9808 is at home in a wide variety of retail operations. For countries that utilize a PDF417 bar code on a national ID card or drivers' license, embedded and server-based parsing agents can decode identification information with very little effort. Since parsing is executed either in the scanner or the host, department, specialty and convenience stores as well as pharmacies can implement a wide range of applications to improve productivity, customer service, customer retention and sales. For example, a quick scan can instantly and accurately auto-populate a credit application, so customers don't have to take the time to fill out application forms. In the pharmacy, a quick scan captures a customer's information to help meet compliance regulations for the purchase of certain over-the-counter and prescription medications. 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 helps prevent fraudulent returns, even if you do not require receipts. The DS9808 also decodes 1D and 2D bar codes from mobile phone displays, so you can roll out mobile coupons, mobile payment, mobile boarding passes, digital loyalty and other emerging mobile commerce applications. And support for an optional RFID module\* enables your retail operation to embrace the benefits of RFID in the future.

**DURABLE DESIGN FOR A LOW TOTAL  
COST OF OWNERSHIP**

The DS9808 is built to withstand the demanding retail environment — and our toughness tests prove it. With a 5 ft./1.5 m drop to concrete drop specification, the scanner delivers 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 support 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. With fewer devices to purchase and manage, your capital and operational costs are significantly reduced. Compatibility with Remote Scanner Management (RSM) supports remote configuration, deployment and day-to-day management of the devices. And for true service peace of mind, our Service from the Start Advance Exchange Support program offers next-business-day device replacement to keep the scanners in the hands of your employees. 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 DS9808 hybrid presentation imager, please visit us on the web at [www.motorola.com/ds9808](http://www.motorola.com/ds9808) or access our global contact directory at [www.motorola.com/enterprisemobility/contactus](http://www.motorola.com/enterprisemobility/contactus)

# SPECIFICATIONS CHART

## PHYSICAL CHARACTERISTICS

|                     |   |
|---------------------|---|
| Dimensions          | 8 in. (max) H x 5.4 in. L x 3.4 in. W<br>20.3 cm (max) H x 13.7 cm L x 8.6 cm W                 |
| Weight              | 12 oz./340 g  |
| Voltage and Current | Maximum: 5 VDC +/- 10% @ 450 mA<br>Maximum (with optional RFID module*):<br>5 VDC +/- 10% @ 1.2 |
| Color               | Twilight Black  |

## PERFORMANCE CHARACTERISTICS

### DS9808-SR and DS9808-LR Imager Mode

|                      |   |
|----------------------|---|
| Light Source         | Aiming Pattern: 650nm laser diode<br>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 Laser Scanner Mode

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

## SYMBOLGY DECODE CAPABILITY

|  |   |
|--|---|
| 1D                                     | UPC/EAN (UPCA/UPCE/UPCE1/EAN-8/<br>EAN-13/JAN-8/JAN-13 plus supplementals,<br>ISBN (Bookland), ISSN, Coupon Code), Code<br>39 (Standard, Full ASCII, Trioptic), Code<br>128 (Standard, Full ASCII, UCC/EAN-128,<br>ISBT-128 Concatenated), Code 93, Codabar/<br>NW7, Code 11 (Standard, Matrix 2 of 5 /<br>MSI Plessey, 1 2 of 5 (Interleaved 2 of 5 /<br>ITF, Discrete 2 of 5, IATA, Chinese 2 of 5),<br>GS1 DataBar (Omnidirectional, Truncated,<br>Stacked, Stacked Omnidirectional, Limited,<br>Expanded, Expanded Stacked, Inverse), Base<br>32 (Italian Pharmacode) |
| PDF417<br>(and variants):              | PDF417 (Standard, Macro), MicroPDF417<br>(Standard, Macro), Composite Codes (CC-A,<br>CC-B, CC-C)   |
| 2D                                     | TLC-39, Aztec (Standard, Inverse), MaxiCode,<br>DataMatrix/ECC 200 (Standard, Inverse),<br>QR Code (Standard, Inverse, Micro)   |
| Postal                                 | U.S. Postnet and Planet, U.K. Post, Japan<br>Post, Australian Post, Netherlands KIX Code,<br>Royal Mail 4 State Customer, UPU FICS 4<br>State Postal, USPS 4CB  |
| Nominal Working<br>Range (Handheld):   | See chart on back   |
| Nominal Working<br>Range (Hands-free): | See chart on back   |
| Minimum Resolution                     | Code 39 – 4 mil, UPC – 7.8 mil (60%),<br>PDF417 – 5 mil, Datamatrix – 5 mil   |

## IMAGING CHARACTERISTICS

|                         |  |
|-------------------------|--|
| Graphics Format Support | Images can be exported as Bitmap,<br>JPEG or TIFF                          |
| Image Transfer Speed    | USB 2.0: Up to 12 Megabits/second<br>RS-232: Up to 115 kb/second           |
| Image Transfer Time     | Typical USB application is ~0.2 seconds with<br>a compressed JPEG of 100kb |
| Image Quality           | 120 DPI on a 4 x 6 in./10.2 x 15.2 cm<br>document @ 6.5 in./16.5 cm        |

## USER ENVIRONMENT

|                        |   |
|------------------------|---|
| Sealing                | IP50  |
| Operating Temp.        | 32° to 104° F / 0° to 40° C   |
| Humidity               | 5% to 95% RH (Non-Condensing)   |
| Drop Specification     | Withstands multiple 5 ft./1.5 m drops<br>to concrete  |
| Ambient Light Immunity | Incandescent – 150 ft. candles (1,600 Lux)<br>Sunlight – 8,000 ft. candles (86,000 Lux)<br>Fluorescent – 150 ft. candles (1,600 Lux)<br>Mercury Vapor – 150 ft. candles (1,600 Lux)<br>Sodium Vapor – 150 ft. candles (1,600 Lux)<br>Immune to normal or artificial light |

## INTERFACES

|                      |   |
|----------------------|---|
| Interfaces Supported | USB, RS-232, RS-485 (IBM 46xx Protocols),<br>Keyboard Wedge |
|----------------------|---|

## REGULATORY

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

## OPTIONS

|                                 |  |
|---------------------------------|--|
| Electronic Article Surveillance | Compatible with Checkpoint EAS<br>deactivation systems |
| Accessories                     | Wall Mount Bracket; RFID Module*                       |

## 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<br>Exchange Support |
|-------------------|--|

*Continued on back*

### 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

\*The RFID module is a future option for use with the DS9808-LR only and will not be available for all countries. Please contact your local Motorola representative regarding availability.

**PRODUCT SPEC SHEET**  
MOTOROLA DS9808

**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 in. (16.5 cm) for UPC/EAN – 13 mil bar codes, if desired.