



# Motorola DS6878-DL

General purpose cordless Bluetooth® 2D imager with integrated Driver's License parsing



## FEATURES

### **Comprehensive advanced data capture**

Eliminates the need to purchase multiple types of devices — captures 1D, 2D and PDF417 bar codes

Optional hands-free presentation cradle enables additional advanced data capture capabilities, including: signatures; images of documents such as drivers licenses and insurance cards; photographs; OCR for the capture of printed text; and MICR for automated capture of check-related data and conversion of check-based transactions to electronic paperless debit transactions

### **Comprehensive advanced data capture supports a world of applications**

The Motorola DS6878-DL cordless imager offers the complete data capture functionality required to streamline and error-proof everyday processes in an ergonomic, comfortable and easy-to-use design. This single device can capture all common bar codes (1D, 2D and PDF417) on labels as well as on mobile phone displays. The on-board Driver's License parsing agent enables the instant decoding of the bar coded information on driver's licenses to support a wide variety of value-added applications. The optional hands-free presentation cradle enables additional advanced capabilities, including: the ability to capture signatures, documents and photographs; optical character recognition (OCR) to capture the text in documents; and MICR to capture the numeric information on the bottom of checks. Electronic recordkeeping is enriched and checks can be instantly converted to electronic debit transactions, reducing the time and cost associated with processing paper checks as well as the risk of check fraud. Add easy remote management, business-class durability, future proofing and world-class support and you

have a scanner that not only offers the advanced data capture features your users need, but also the extraordinary total cost of ownership (TCO) required to easily justify this technology investment.

### **Revolutionary scanning performance improves productivity and transaction speed**

Built on Motorola's revolutionary SE4500 scan engine, the DS6878-DL breaks the barriers that have long separated 1D laser scanning and 2D imaging technologies, delivering an industry first — 1D laser scanning performance on 2D bar codes. Businesses no longer need to sacrifice speed and scanning quality for bar code scanning diversity. Exceptional motion tolerance enables extraordinary scanning speed on all bar codes. The scanner can capture even poor quality and damaged bar codes, virtually eliminating exceptions. The easy to use device offers an intuitive aiming pattern and full omni-directional scanning, which eliminates the need to precisely align bar code and imager. And the patent-pending fast-pulse illumination consistently delivers the light required to capture the bar code, enabling use in virtually any type of lighting. The result is increased throughput — and productivity.

### **Integrated Driver's License parsing agent**

Enables instant decoding of the bar coded information on driver's licenses and other national ID documents for effortless auto-population of credit card, loyalty card and other forms; simplifies and error-proofs age verification at POS

### **Superior high performance scanning on all bar codes**

The integrated revolutionary Motorola SE4500 imager eliminates the performance degradation common in 2D scanning, delivering: laser-like performance on both 1D and 2D codes; rapid and accurate capture of even poor quality and damaged bar codes; and full omni-directional scanning, which eliminates the need to precisely align bar code and imager, improves ergonomics and protects productivity

### **Superior durability**

Offers Motorola's best-in-class drop specification — the ability to survive 6 ft./1.8m drops to concrete — and IP43 sealing, ensuring reliable operation in spite of everyday spills, drops and bumps

### **Lightweight ergonomic design**

Easy to hold regardless of hand size; reduces fatigue; enables all day scanning comfort to protect productivity in scan-intensive applications

### **Latest Bluetooth technology delivers cordless freedom and more**

The ability to roam up to 300 ft./100 m away from a host device offers cable-free convenience, improving safety and allowing the extension of advanced data capture in more applications and industries. The latest Bluetooth® technology — V2.1 with EDR — improves security and power management, offering superior protection for the wireless data traveling between scanner and host and helping to ensure ample power for full shift use.

### **Business-class durability**

The DS6878-DL is built to survive everyday all day use in enterprise environments. The device offers Motorola's best-in-class drop specification — 6 ft./1.8m drops to concrete. IP43 sealing protects

sensitive electronic components from exposure to dust and liquids. The result is dependable operation, despite the inevitable everyday drops, bumps and spills.

### **Low management costs**

Integrated support for Motorola's Remote Scanner Management (RSM) technology combines with Motorola's complementary 123Scan2 scanner management software utility to enable effortless centralized management of all your DS6878-DL scanners. The ability to automate asset tracking, configuration and firmware updates dramatically reduces the time, cost and logistical headaches typically associated with the management of mobile devices.

### **Future proof**

Support for emerging bar code symbologies and industry trends helps future proof the DS6878-DL, protecting lifecycle and TCO. The device can read GS1 Data Bar codes, a symbology that provides the rich product information required to enable better inventory management, improve purchasing decisions and streamline supply chains. In addition, the ability to read bar codes that are displayed on cell phone screens enables mobile loyalty and mobile couponing programs — the latest trend in marketing and customer relationship management (CRM).

### **World-class support for maximum uptime**

Keep your DS6878-DL scanners up and running at peak performance with Motorola's Service from the Start Advance Exchange Support. This exceptional service minimizes downtime with next-business-day replacement of devices that require repair. Your scanners will also be protected from the unexpected with built-in Comprehensive Coverage, which covers virtually anything that might happen to the device — from accidental damage to normal wear and tear. Unforeseen repair expenses are significantly reduced, providing service peace of mind from the date of purchase.

For more information on how you can put the DS6878-DL to work in your organization, please visit us on the web at [www.motorola.com/DS6878DL](http://www.motorola.com/DS6878DL) or access our global contact directory at [www.motorola.com/enterprisemobility/contactus](http://www.motorola.com/enterprisemobility/contactus)

## **Applications**

### **Retail**

- Point of Sale (POS) purchase transactions
- Age verification
- Returns monitoring
- Auto-population of credit and loyalty card applications
- Controlled item sales — capture of signature and other proof of identity, such as a photo of a Driver's License
- Mobile loyalty and couponing programs
- Electronic recordkeeping — capture of paper prescriptions, check-related data and more
- Payment processing — convert paper checks to electronic debit transactions

### **Hospitality**

- Expedited Guest Check-in
- Loyalty Card Sign-Up
- Event admission gates

### **Travel and Transportation**

- Boarding gates

### **State & Local Government**

- Libraries — book checkout and return

### **Federal Government**

- Border security — scanning of passports, visas and other government issued ID cards

### **Healthcare**

- Admitting — more rapid patient check-in and accurate capture of patient information

# Motorola DS6878-DL Specifications

## Physical Characteristics

Dimensions:	Scanner: 7.3 in. H x 3.85 in. L x 2.7 in. W/ 18.5 cm H x 9.7 cm L x 6.9 cm W CR0078-S Base-mounted vertically: 8.35 in. H x 3.4 in. W x 2 in. D/ 21.1 cm H x 8.6 cm W x 5 cm D CR0078-S Base-mounted horizontally: 2.0 in. H x 8.35 in. L x 3.4 in. W/ 5 cm H x 21.1 cm L x 8.6 cm W
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Weight:	Scanner: 8.4 oz (238 g) Typical CR0078-S Base: 6.4 oz. (183 g) Typical
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Voltage and Current (CR0078-S Base):	<i>Voltage</i> 5 +/-10% VDC	<i>Typical Current Charging/Non Charging</i> 700 mA/260 mA with external power 490 mA/260 mA with host power through cable
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Available Colors:	Twilight Black; Cash Register White
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## Performance Characteristics

Light Source:	Aiming Pattern: 655 +/- 10 nm laser diode Illumination: 625 +/- 5 nm LED
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Field of View:	39.2° horizontal, 25.4° vertical
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Roll / Pitch / Skew:	360°, ±60°, ±60°
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## Symbology Decode Capability

1-D:	UPC/EAN (UPCA/UPCE/UPCE1/EAN-8-EAN-13/JAN-8/JAN13 plus supplementals, ISBN (Bookland), ISSN, Coupon Code, Code 39 (Standard, Full ASCII, UCC/EAN-128, ISBT-128 Concatenated), Code 93, Codabar/NW7, Code 11 (standard, Matrix 2 of 5), MSI Plessey, I 2of 5 (Interleaved 2of 5 / ITF, Discrete 2of 5 IATA, Chinese 2 of 5) GS1 Databar (Omnidirectional, Truncated, Stacked, Stacked Omnidirectional, Limited, Expanded, Expanded Stacked, Inverse), Base 32 (Italian Pharmacode)
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PDF417 (and Variants):	PDF417, microPDF417, Composite Codes (CC-A, CC-B, CC-C)
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Postal:	U.S. Postnet and Planet, U.K., Japan, Australian, Netherlands KIX code, Royal Mail 4 State Customer, UPU ICS 4 State Postal, USPS 4CB
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2-D:	TLC-39, Aztec (Standard, Inverse), MaxiCode, DataMatrix/ECC 200 (Standard, Inverse), QR Code (Standard, Inverse and Micro)
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Print Contrast:	25% minimum reflectance
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Interfaces Supported (CR0078-S Base):	RS-232C (Standard, Nixdorf, ICL, and Fujitsu); USB (Standard, IBM SurePOS, Macintosh), IBM 468x/469x, keyboard wedge and wand emulation. Synapse connectivity allows for connectivity to all of the above plus many non-standard interfaces.
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Note: National Drug Codes (NDC) can be encoded in various symbologies. The DS6878-DL can be programmed to parse these codes using Advanced Data Formatting (ADF) rules.

## Imaging Characteristics

Graphics Format Support:	Images can be exported as Bitmap, JPEG, and TIFF (requires the hands-free presentation cradle)
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Image Quality:	120 DPI on a 4 in. x 6 in. (10.2 x 15.2 cm) document @ 6.5 in./16.5 cm
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## User Environment

Sealing:	IP43 (water and dust resistant)
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Operating Temperature:	32° F to 122° F/0° C to 50° C
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Storage Temperature:	-40° F to 158° F/-40° C to 70° C
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Humidity:	5% to 95%, non-condensing
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Drop Specifications:	Withstands multiple 6 ft./1.8m drops to concrete
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Ambient Light Immunity:	Immune to normal artificial indoor and natural outdoor (direct sunlight) lighting
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## Regulatory

Electrical Safety:	UL6950-1, CSA C22.2 No. 60950-1, EN60950-1/IEC60950-1
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Laser Safety:	EN60825-1:1994+A1:2002+A2:2001, IEC60825-1, 21CFR1040.10 and 21CFR1040.11, CDRH Class II, IEC Class 2
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EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B, CISPR 22, CISPR 24; Medical electrical equipment: EN60601-1-2:2002
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Environmental:	Compliant with RoHS directive 2002/95/EEC
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Radio:	Bluetooth™, Class 1, Version 2.1 + EDR, Adaptive Frequency Hopping (enables co-existence with 802.11 wireless networks), serial port & HID profiles; data rate — up to 3 Megabits/sec
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## Accessories

Power Supplies:	Power supplies are available to support faster charging or for applications that do not supply power over the host cable
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Mounting Brackets:	Wall-mount bracket
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## Warranty

Subject to the terms of Motorola's hardware warranty statement, the Symbol DS6878-DL is warranted against defects in workmanship and materials for a period of three 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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## DS6878-DL Typical Decode Ranges (Trigger Mode)

Barcode Type	Barcode Density	DL Ranges Inches from scanner nose (typical)
Code 39	5 mil	0.5 - 6.3 in.
Code 128	6 mil	1.3 - 5.4 in.
Code 128	10 mil	* - 8.0 in.
60% UPC	7.8 mil	0.6 - 7.2 in.
100% UPC	13 mil	0.7 - 11 in.
PDF	5 mil	1.9 - 3.5 in.
PDF	6.6 mil	1.0 - 5.9 in.
PDF	10 mil	* - 8.0 in.
DataMatrix	10 mil	1.1 - 7.2 in.

\* Limited by FOV

## Flexible horizontal or vertical mounting

Easy to mount in virtually any environment — from countertop to invisible under-the-counter installation in space constrained areas

## USB charging

Eliminates the costs associated with purchasing, managing and providing power to a separate power supply

## Bluetooth® v2.1 with EDR

Provides a secure wireless connection to the scanner base station for cordless convenience and safety

## RSM (Remote Scanner Management) Ready

Reduces total cost of ownership by enabling remote, network-based device management of all devices in all locations

## Supports 123Scan2 scanner configuration tool

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

## SPECIFICATION SHEET

Motorola DS6878-DL  
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[motorola.com](http://motorola.com)

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