



MAXIMUM PERFORMANCE, PRODUCTIVITY, SCANNING RANGE AND RUGGED DESIGN

# MOTOROLA DS3500-ER SERIES

## RAPIDLY SCAN 1D AND 2D BAR CODES AT NEARLY ANY RANGE — FROM NEAR TO FAR

Warehouses in distribution centers and manufacturing plants, warehouse-style retail stores, outdoor lumber yards and pipelines all have one thing in common — the need to scan different types of bar codes across a wide range of distances. The DS3500-ER Series of full range corded and cordless scanners allows you to do just that — capture bar codes from near contact to as far as 30 ft./9.14 m away. With this single device, workers can scan an item in hand or an item on the tallest rack in the warehouse. The need to purchase multiple types of devices to capture different types of bar codes at different distances is eliminated, so you can boost productivity and minimize your investment.

## DELIVERING THE ULTIMATE IN SPEED

When it comes to performance, you can expect the same superior scanning experience that has made Motorola the world's leader in bar code technology. Easily read bar codes under several layers of shrink-

wrap — without any impact on read speed.

Workers can also hold the trigger down to continuously scan items. It doesn't matter how well lit an area is — the DS3500-ER Series can read bar codes in darkness or in bright sunlight. And you can easily format the data for easy integration into your existing systems, without costly modification of host software.

## BUILT TO LAST IN THE HARSH EST INDUSTRIAL ENVIRONMENTS

With Motorola's maximum rugged specifications, the DS3500-ER Series can handle whatever comes its way during the workday. Indoors and outdoors, you can drop it on concrete, cover it in dust or grease, spray it with high pressure jets of water or expose it to extreme temperatures with the same result — day-in and day-out reliable operation.

For more information on how you can put the DS3500-ER Series to work in your organization, please visit us on the web at [www.motorolasolutions.com/ds3500er](http://www.motorolasolutions.com/ds3500er) or access our global contact directory at [www.motorolasolutions.com/contactus](http://www.motorolasolutions.com/contactus)

## FEATURES

### Wireless option with Integrated Bluetooth Class II, Version 2.1

Cable-free convenience; secure wireless transmissions; reduces repairs due to cable failure

### Maximum scanning range:

Full range scanner captures from near contact to over 30 ft./9.14 m

### Scans 1D and 2D bar codes:

Flexibility to capture the bar codes in use today — and tomorrow

### Maximum rugged design:

IP65; 6.5 ft./2m drop to concrete; 2,000 revolutions (4,000 hits) in Motorola's tumble drum; dual frictionless fixed sensor design

### Superior motion tolerance:

Protects productivity — no wait times between trigger pulls

### FIPS 140-2 validated:

Secures the most sensitive data and enables compliance with a myriad of industry regulations (cordless models only)

**Omni-directional:** No need to line up scanner and bar code

### Superior decode capability:

Captures bar codes under multiple layers of shrinkwrap as well as codes that are damaged, scratched or dirty

**Scan in darkness or in bright sunlight:** Maintain productivity in any lighting

### Continuous scanning mode:

Depress and hold trigger to keep scanning — no pausing between scans

### Advanced data formatting:

Enables sophisticated formatting of scanned data before it is sent to the host, eliminating the high cost of modifying your host application

# SPECIFICATIONS CHART

## PHYSICAL CHARACTERISTICS

Dimensions	7.34 in. L x 4.82 in. W x 2.93 in. D 18.65 cm H x 12.25 cm W x 7.43 cm D
Weight	DS3508-ER (without cable): 12.8 oz. (363 grams) DS3578-ER: 13.79 oz. (391 gm)
Battery	DS3578 only: 2200 mAh Lithium Ion Battery (note that DS3508 does not require a battery)
Battery Charge Time	Fully charged (100%) in 4.5 hours
Color	Twilight Black/Yellow

## PERFORMANCE CHARACTERISTICS

Light Source	Aiming pattern: 650nm visible laser diode Illumination: 630nm LED
Roll/Pitch/Yaw	360°, ±60°, ±60°
Motion Tolerance	Up to 60 in./sec. (1.52m/sec.) for 100% 13 mil UPC; motion tolerance will vary depending on code type, scan distance and print quality

## USER ENVIRONMENT

Operating Temp	-4° F to 122° F/-20° C to 50° C
Storage Temp	-40° F to 140° F/-40° C to 60° C
Humidity	5% to 95% relative humidity, non-condensing
Sealing	Sealed to IP65 specifications
Drop Specifications	Functions normally after repeated 6.5 ft. (2 m) drops to concrete
# Cradle Insertions	DS3578 only: 250,000+ insertions (not applicable to DS3508)
Ambient Light Immunity	Sunlight – 8,000 ft. candles (86,000 LUX); Incandescent; Fluorescent; Mercury Vapor; Sodium Vapor – 150 ft. candles (1,600 LUX); Immune to direct exposure to normal office and factory lighting conditions, as well as direct exposure to sunlight

## SYMBOLGY DECODE CAPABILITY

1D Codes	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 (Omni-directional, Truncated, Stacked, Stacked Omni-directional, 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)

### DS3500-ER Series Decode Zone

	Guaranteed Scan Engine Working Range	
	Near	Far
Code 39 - 7.5 mil	8.5 in./21.6 cm	34 in./86.4 cm
Code 39 - 10 mil	8 in./20.3 cm	42 in./106.7 cm
Code 39 - 20 mil	*	88 in./223.5 cm
Code 39 - 55 mil	*	205 in./520.7 cm
Code 39 - 100 mil	*	335 in./851.0 cm

\* Dependent upon length of bar code

2D Codes	TLC-39, Aztec (Standard, Inverse), MaxiCode, DataMatrix/ECC 200 (Standard, Inverse), QR Code (Standard, Inverse, Micro)	
Postal	U.S. Postnet, U.S. Planet, U.K. Postal, Japan Postal, Australian Postal, Dutch Postal, 4 State Postal	
IUID Support	Supports IUID parsing — the ability to read and separate IUID fields per application requirements	
<b>CRADLES<sup>1</sup></b>	<b>STB 3508 and FLB 3508</b>	<b>STB 3578 and FLB 3578</b>
Power Reqs.	4.75-14 VDC	4.75-14 VDC
Typical current draw:		
<i>Not charging</i>	35 mA @5V 45 mA @9V	105 mA @5V 110 mA @9V
<i>Fast rate charge<sup>2</sup></i>	915 mA @5V 660 mA @9V	915 mA @5V 660 mA @9V
<i>Slow rate charge<sup>3</sup></i>	480 mA @5V 345 mA @9V	480 mA @5V 345 mA @9V

## RADIO SPECIFICATION

Radio	Bluetooth Class II Version 2.1, Serial Port and HID Profiles
Frequency	2.402 to 2.480 GHz adaptive frequency hopping and co-existence with 802.11 wireless networks
Data Rate	720 Kbps
Radio Range	Radio range: Up to 300 ft. (100m) direct line of sight in open air. typical indoor cordless range is 100 ft. (33m), but range will vary depending upon environment

## INTERFACES

Interfaces Supported	USB, RS-232, RS-485 (IBM 46xx Protocols), Keyboard Wedge
Electrostatic Discharge (ESD):	+/- 15kV air discharge and +/-8kV contact discharge

## REGULATORY

Electrical Safety	UL60950-1, CSA C22.2 No. 60950-1, EN 60950-1 / IEC 60950-1
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

Accessories	Holster; tool balancer pulley (tethered); standard cradle (charge only; radio/charge); forklift cradle (charge only; radio/charge)
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## WARRANTY

The Motorola DS3500-ER Series is warranted against defects in workmanship and materials for a period of 3 years (36 months) from date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions.

## RECOMMENDED SERVICES

Service from the Start Advance Exchange Support

## NOTES

1. Cradles STB/FLB3508 and STB/FLB3578 are utilized with the DS3578. (The DS3508 does not use a cradle; it is tethered to the host.) In addition, STB/FLB3508 is a charge-only cradle with no communication capabilities.
2. Requires an external power supply.
3. Cradle defaults to slow rate charge when an external supply is not used.