



# MS851B

## 1D Bluetooth® Laser Scanner

Redefine work productivity with the MS851B wireless barcode scanner. High-speed efficiency coupled with low cost of ownership makes this 1D reader a great addition to warehouse, logistics, and manufacturing environments.

### High Speed Laser Scanning Performance

With automatic scanning capability and a read rate of 104 scans per second, the MS851B reaches above and beyond the limitations of economy scanners in its class. Never worry about a missed scan because the MS851B reads damaged and poorly printed codes with ease, it also features long range barcode capture, maximizing versatility in one device.

### Move without Restrictions

With the wireless MS851B, you have the freedom to move. Bluetooth® dual mode technology (Bluetooth® LE V4.2 & Bluetooth® 2.1+EDR, Class 1) offers reliable connections to the host while pairing to a smartphone, tablet, or computer is seamless. Data can be transmitted wirelessly from up to 328 feet (100 m) from the base. Up to 590,000

barcodes can be stored in the MS851's memory when out of range delivering convenience with every scan.

### Customizable Options

The MS851B gives you the power to choose. With easily changeable modes, switch between trigger and presentation mode for a scanner that conforms to suit any business. An included charging cradle adds value to the device and cuts down on wear and tear from a charging cable. The cradle offers three-way cable management slots for additional scanners allowing convenient cable installation for multiple devices.

### All Day Use

The lithium-ion battery keeps the MS851B moving all day long for continuous usage. The device runs for up to 30 hours on a single charge while a long trigger lifecycle of up to 10 million times promotes consistent productivity. A 6.8 foot (2.1 meter) drop test and IP42 environmental seal protects the device from damage from falls and against elements like dirt, dust, and water. A long scanning range means the MS851B is suitable for a variety of uses such as retail and inventory applications.

### Main Features:

- Supports Bluetooth® dual mode technology (Bluetooth® LE V4.2 & Bluetooth® 2.1+EDR, Class 1)
- Wireless transmission range up to 328 feet (100m) in the line of open sight
- High speed data capture performance: up to 104 scans/sec
- Long battery life: up to 30 hours on a single charge
- Durable design: IP42 rated and 6.8 feet (2.1m) drop spec
- Auto Bluetooth pairing / Auto switch between trigger & presentation mode with cradle

### Optical & Performance

Sensor	1D Laser
Illumination	650 nm visible laser diode
Ambient Light	Sunlight: 8000 Ft Candles (86,111 Lux)
Scan Rate	104 (± 12) scans/sec (bidirectional)
Skew Angle	±40° from normal
Pitch Angle	±65° from normal
Roll Angle	±35° from vertical
Optical Resolution	4mil (0.1mm)
Printing Contrast Scale	minimum 20%
Depth of Field	(DOF PCS=80%)
	Symbology   Density   Near   Far
	Code 128, 5 mils   3.55 cm   17.78 cm
	Code 39, 5 mils   3.05 cm   26.67 cm
	Code 39, 7.5 mils   3.04 cm   41.91 cm
	Code 128, 10 mils   3.05 cm   40.46cm
	UPC, 13 mils   4.57 cm   63.50 cm
	Code 128, 15 mils   5.08 cm   66.04 cm
	Code 39, 20 mils   3.56 cm   116.84 cm
	Code 39, 55 mils   8.64 cm   177.80 cm
	Code 39, 100 mils   60.96 cm   457.20 cm
1D Symbologies	Code 39, Full ASCII Code39, Interleave 2 of 5, UPC A/E/E1, MSI, Codabar, Code 11, EAN8/13, Code 93, Code 128, EAN128, Code32, GS1 databar Code, Bookland EAN, Discreate 2 of 5, Chinese 2 of 5, ISBT 128, UCC Coupon Extended Code, Bookland 128

### Communication

Radio	Bluetooth® LE V4.2 Bluetooth® 2.1+EDR, Class 1 Dual mode
Wireless Coverage	328 feet (100m) line of sight
Interface/ Profile	Serial Port and HID profiles
Host Interface supported	USB, RS232

### Mechanical

Dimension	3.4 in x 2.8 in x 6.9 in (87.8 mm x 71.6 mm x 177.7 mm)
Weight	7.5 oz (213 g) without cradle
Trigger Switch Life	10 million times



MS851B Cradle

### Electrical

Battery Type	Rechargeable and replaceable battery pack.
Battery Capacity	2850mAh
Battery Charging time	<6.5 hours
Operating Time	>30 hours
User Indicators	LED & Beeper & Vibrator

### Environmental

ESD Protection	Functional after 8K Contact and 15K Air
Mechanical Shock	6.8 feet (2.1 m) onto concrete (scanner only)
IP Rating	IP42
Operating Temperature	14°F to 122°F (-10°C to 50°C)
Storage Temperature	-40°F to +158°F (-40°C to +70°C)
Relative Humidity	95% non-condensing

### Regulatory

CE, FCC, BSMI, VCCI, NCC, TELEC, BQB

### Accessories

Cradle  
Interface cable  
Battery pack

### Package Contents

MS851B Scanner with battery  
Cradle  
Interface cable



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