



# MS851B

## Bluetooth® Laser Scanner



Combining mobility wireless design and durability at an affordable price, MS851B wireless laser scanner is ideal for a broad range of market applications such as warehouse, logistics, and manufacturing solutions.

### High Speed Laser Scanning Performance

Featuring laser scanning technology, the MS851B has the automatic scanning ability with a scan rate of up to 104 scans per second. It also has the ability to capture long range 1D barcodes, even damaged or poorly printed barcodes. This device enhances the workflow efficiency in an affordable price.

### Move without Restrictions

The MS851B supports Bluetooth® dual mode technology (Bluetooth® LE V4.2 & Bluetooth® 2.1+EDR, Class 1) to give you the freedom and bring your business the flexibility. It is compatible with any smartphone, tablet, or computer—the MS851B pairs easily to any mobile device or PC. Besides, it allows users to transmit data to the host from up to 100 meters from the base.

### Flexibility with Cradle Accessory

This MS851B wireless scanner has a cradle accessory that supports auto Bluetooth® pairing and it has the ability to switch between trigger or presentation mode automatically. This cradle is also available to be connected with 3 scanners at the same time and provides three-way cable management slots for more convenient cable installation. When it is out of range reading in Auto Mode, the scanned data will be saved into the MS851B memory buffer automatically and transmit to the host when back to the wireless coverage. Moreover, MS851B can be set to batch mode reading, all the scanned data will be stored in a memory buffer and upload to your devices at your own convenience.

### Durable for All Day Use

Built for all day use, the MS851B is built in a lithium-ion battery can be replaced easily. It has a long life battery life up to 30 hours per battery charge. While sustaining a 2.1 meter drop to concrete, MS851B incorporated with IP42 rugged design for protection against dust and moisture. Moreover, the built-in long lifecycle trigger of 10 million times guarantees a continuous productivity for best reliability. This scanner can be used in the most practical way depending on the long range scanning task in various solutions in retail and inventory applications.

### Features

- Support Bluetooth® dual mode technology (Bluetooth® LE V4.2 & Bluetooth® 2.1+EDR, Class 1)
- Wireless transmission range up to 100m in the line of open sight.
- High Speed data capture performance: up to 104 scans/sec
- Long battery life up to 30 hours per a fully charged battery
- Durable design : IP42 and 2.1m drop spec
- Auto Bluetooth pairing / Auto switch between Trigger & Presentation mode with cradle



# MS851B

## Specifications

### 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°
Pitch Angle Sensor	±65°
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

### Communication

Radio	Bluetooth® LE V4.2 Bluetooth® 2.1+EDR, Class 1 Dual mode
Wireless Coverage	100m ( line of sight)
Interface/ Profile	Serial Port and HID profiles
Host Interface supported	USB, RS232
Memory Buffer	7MB for batch mode / 20KB for auto mode

### Mechanical

Dimension	87.8 L x 71.6 W x 177.7 H (mm)
Weight	213 (without cradle)
Trigger Switch Life	10 million times
Cradle Dimension	120.6 L x 88.7 W x 86.0 H (mm)

### Symbologies

1D	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
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### Environmental

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

### Environmental

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

### Accessories

Cradle
Interface cable
Battery pack

### Package Contents

MS851B Scanner with battery
Cradle
Interface cable

### Regulatory Approvals

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



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