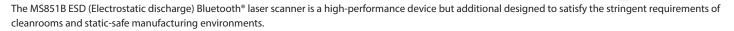# MS851B ESD

Bluetooth® ESD-safe Laser Scanner

The MS851B ESD (Electrostatic discharge) Bluetooth® laser scanner is a high-performance device but additional designed to satisfy the stringent requirements of cleanrooms and static-safe manufacturing environments.

ESD Protection

The MS851B ESD (Electrostatic discharge) Bluetooth® laser scanner is a high-performance device but additional designed to satisfy the stringent requirements of cleanrooms and static-safe manufacturing environments. unitech's MS851B ESD-safe scanner is made by internal mixed way with antistatic agent to protect MS851 series to be ESD safe to be used at ESD protected area including its cable. With the Internal mixed way, the body of the product and its cable can withstand ESD up to 10^5~10^9 ohms per square and no containing Chlorine material. The Internal mixed way can provide a longer time of ESD protection than external addition way due to external additional anti-static in the latter part of the packaging or processing process was wiped away. An internal mixed antistatic agent can continue to add antistatic agent to the plastic surface, to make up the surface due to wipe and the amount of antistatic agent consumed. It is a reliable tool to streamline your workflow in manufacturing environments.

High-Speed Laser Scanning Performance

Featuring laser scanning technology, the MS851B ESD 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 workflow efficiency at an affordable price.

Move without Restrictions

The MS851B ESD 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 ESD 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 ESD wireless scanner has a cradle accessory that supports auto Bluetooth® pairing and it has the ability to switch between trigger or presentation mode automatically. When it is out of range reading in Auto Mode, the scanned data will be saved into the MS851B ESD memory buffer automatically and transmit to the host when back to the wireless coverage. Moreover, MS851B ESD 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.

Features

- Withstands ESD up to 10^5~10^9 ohms per square
- 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

unitech
because we care

System

Memory	7MB for batch mode/ 20KB for auto mode
Key	Trigger Key

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	Symbology | Density | Near | Far
(DOF PCS=80%)	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 2 Dual mode
Wireless Coverage	100m (line of sight)
Interface/ Profile	Serial Port and HID profiles
Host Interface supported	USB

Regulatory Approvals

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

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
Data Formatting	Prefix, Suffix, Code ID, Reformatting Date

Functionality

Operation Mode	Trigger Mode, Presentation Mode, Buffer Mode

Electrical

Indicator	LED & Beeper & Vibrator
Battery Type	Rechargeable and replaceable battery pack.
Battery Capacity	2850mAh
Battery Charging time	<6.5 hours
Operating Time	>30 hours
	Up to 50,000 scans at 1 scan/5 second

Environmental

ESD Protection	Functional after 8K Contact and 15K Air
Mechanical Shock	2.1 M 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

USB cable
1-slot charging cradle
Battery pack

Package Contents

MS851B ESD Scanner with battery
Cradle
Interface cable

Headquarters
Taipei, Taiwan
http://www.ute.com   e-mail: info@hq.ute.com

unitech America
Los Angeles
http://us.ute.com   e-mail: info@us.ute.com
http://can.ute.com   info@can.ute.com
Mexico
http://latin.ute.com   e-mail: info@latin.ute.com

unitech Asia Pacific & Middle East
Taipei
http://apac.ute.com   info@apac.ute.com / info@india.ute.com
http://mideast.ute.com   info@mideast.ute.com

unitech Europe
Tilburg / Netherlands
http://eu.ute.com   e-mail: info@eu.ute.com

unitech Japan
Tokyo
http://jp.ute.com   e-mail: info@jp.ute.com

unitech Greater China
Beijing, Shanghai, Guang Zhou, Xiamen
http://cn.ute.com   info@cn.ute.com
Taipei   http://tw.ute.com   info@tw.ute.com

www.ute.com
08/20 Rev.B