



# MS650

## Wearable CCD Ring Scanner

unitech announced the release of its latest MS650 wearable CCD Ring Scanner with wireless BT technology, allowing users to wear on your fingers and keep both hands free for movement scanning. The MS650 is a compact, lightweight and ergonomic tool which is designed to streamline the workflow for a wide range of applications such as warehouse, logistics and inventory management.

### Compact Wearable Ring Scanner

The unique trap design of MS650 delivers the convenience for the users, it can be worn on the back of the fingers with a lightweight size that workers can keep both hands free for movement scanning. This device enhances the flexible and comfortable for users while doing data collections as well as maintaining optimal functionality. With the wearable design, users can reduce the accidental drops which provides the highly efficient way.

### Superior Readability on LCD Screens

The MS650 has capability to scan 1D barcodes on the LCD screen surface is reflective and paper in any orientation and it can automatically capture barcodes within its field of view in any lighting conditions from darkness to direct sunlight (70,000 lux). The MS650 gives your workforce the on-screen barcode readability which is suitable to use in point of sale, access control management applications. Featuring the high-speed decoder paired with an aggressive scan engine, the MS650 wireless ring barcode scanner delivers great performance up to 400 scans per second as well as capturing 1D barcode data with a 4 mil resolution and a scanning width up to 130mm. Furthermore, it has an IP42 rating for dust and water resistance as well as a 1.5 meter drop spec that provides superior durability and reliability. Combining high performance and compact design, MS650 gives mobile worker conveniently and safely while on the go.

### Data Protection Accountability

With the Bluetooth HID interface of wireless BT 4.1 technology, MS650 is easy to pair with your smart phone and tablets (including iOS or android system) without complex setting. Moreover, the wireless BT 4.1 support AES 128-bit encryption to protect data against unauthorised access and effectively avoids interferences by utilizing 24-bit CRC surveillance while data is being transmitted from MS650 ring scanner to the host.

### Flexible Wireless Connections

Also, the MS650 delivers the flexibility with the 10 meters operating range from the host that helps users to improve efficiency in mobile work place. It provides the convenience of wireless technology with the simplicity of a single touch button design which makes barcode data collection simple and reliable for all users. In addition, the MS650 can be utilized with an auto mode that ensures no data is lost while it is out of range of the wireless signal, also upload the data to the back-end system with a simple setting, allowing users to complete their tasks without interruption. In addition, the MS650 allows users to facilitate a data transfer and charge the internal Lithium-Ion battery by utilizing a standard USB port. With an ergonomic and compact design, the MS650 wireless ring barcode scanner delivers users powerful way to complete data collection tasks.

### Features

- Lightweight and unique wearable ring design
- Available to read off 1D barcodes from screens
- Flexibility wireless design with 10M operation range
- Rugged and durable design with IP42 and 1.5m drops
- Easily pair to smart phones and tablets ( Including iOS/ Android devices)
- Available to facilitate a data transfer from scanner to computer via USB port
- Full Shift Battery Life: Up to 8 Hours

## Wearable CCD Ring Scanner



### Optical & Performance

Light Source	Red Laser beam with enhanced white LED
Sensor	Linear Image Sensor
Scan Rate	400 Scans/Sec
Resolution	4mil/ 0.1mm
Scan Angle	41°
Print Contrast Ratio	30%
Width of Field	130mm (13Mil Code39)
Memory	2MB
D.O.F	
(Environment: 800 lux)	

Label / DOF	near	far
Code 39, 4mil	50mm	70mm
Code 39, 5mil	45mm	95mm
Code 39, 10mil	40mm	190mm
Code 39, 15mil	55mm	265mm
UPC/EAN, 13mil	50mm	225mm

### Physical Characteristics

Scanner Dimension	W29 x L46.5 x H27 mm
Scanner Weight	20.5g (including Velcro strap)
Color:	
	- Top housing: Blue
	- Bottom housing: Black
Surface:	
	- Top housing: Glossy
	- Bottom housing: Matte
Material	PC+ABS
Cable	1.5M (Micro USB Cable)
Trigger	Capacitive sensor *2 for left and right buttons
Indicator	LED, Buzzer

### Electrical

Operation Voltage	3.7VDC ± 5%
Working Current	< 85mA
Standby Current	< 45mA
Power Down Current (Sleep Mode)	< 200uA
Battery	3.7V, 200mAh, Li-Polymer Battery
Number of Scan (per full charge)	6000 scans (1 scan/ 5 secs, BT connected)

### Connectivity

Radio	BT 4.1 (Class 2)
Range	> 10 m (line-of-sight at open space)
Interface/ Profile	Bluetooth HID (HID Keyboard Device) USB HID (HID Keyboard Device) USB VCP (Virtual COM Device) Batch Mode (Mass Storage Device)

### Environmental

Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 65°C
Humidity	95% non-condensing
Drop Durability	1.5M
Sealing	IP42
Ambient Light	70,000 Lux (Sunlight)
Symbologies	UPC-A/UPC-E, EAN-8/EAN-13, Industrial 2 of 5, Codabar, Matrix 2 of 5, Code 11, Code 93, Code 32, Code 128, Standard Code 39, Full ASCII Code 39, Interleaved 2 of 5, China Postal Code, MSI Plessey Code, UK Plessey Code, EAN/UCC 128, Telepen Code, IATA Code, GS1 Databar

### Regulation Approvals

ESD	Functional after 4KV contact, 8KV Air discharge
EMC	CE, FCC, BSMI, NCC, TELEC, VCCI
Safety Approval	WEEE, RoHS 2.0, IEC 60825-1



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