



# MS650 CCD Ring Scanner

## Wearable Design for Hands-Free Scanning!



The MS650 wearable ring scanner is an ultra-light compact Bluetooth barcode scanner, allowing you to wear it on a finger to keep both hands free for easy movement scanning. This ring scanner can read 1D barcodes and it is designed to streamline the workflow for a wide range of applications such as warehouse, logistics, retail and inventory management.

### *Gaining freedom of movement and improving efficiency.*

The MS650 wearable ring scanner enables its operator to move products, packages, materials and proceed with their barcode reading tasks more efficiently, safely and comfortably.

#### **Compact design for mobile operators**

Whether you prefer left or right-handed operation, the advanced ergonomic and lightweight design (20.5g) of the MS650, provides unrivalled freedom of movement to perform barcode scanning tasks, comfortably while keeping both hands free.

It's all in the touch! The MS650 is designed with a dual touch-2-activate trigger button to activate the barcode reading. Whether you are wearing the MS650 left- or right-handed, just motion the touch-2-activate trigger button to read the barcode you wish to scan. A great feature to enhance control and flexibility, while increasing the operator satisfaction during multi-tasking.

#### **On-Screen Barcode Readability**

Featuring the high-speed decoder, paired with an aggressive scan engine, the MS650 reads 1D barcodes and offers accurate barcode capture of either on-screen (LCD), or printed barcodes. To ensure accurate aim at barcodes, the MS650 is equipped with a thin sharp class-1 laser aim.

#### **Data Protection Accountability**

With the Bluetooth® HID interface of wireless Bluetooth® 4.1 technology, the MS650 is easy to pair with a smartphones and tablets (including iOS or Android system) without complex setting. The MS650 offers user the ability to operate around the clock productivity, during an entire busy 8-hour work shift.

#### **Flexible wireless connections and operations**

The MS650 is versatile with the advantage of conducting flexible data collection operations of both on-line wireless mode and off-line memory (Batch) mode, including multiple communication interfaces (BT HID/ USB HID/ USB VCP).

#### **Features:**

- Lightweight (only 20.5g) and unique wearable ring design – Comfortable Hands-free operation.
- Flexible design: Dual touch-2-activate trigger button (for left- and right-handed operation)
- Hands-free scanning with cordless freedom of movement
- Easily to pair to smartphone and tablets (Windows, iOS and Android devices) via Bluetooth® 4.1 / Class 2
- Aggressive scan engine – Reads off 1D barcodes from screens
- Rugged and durable design (IP42 and 1.5m drops)
- Full shift battery life – Up to 8 hours

LED Indicator



Function button

1D CCD

To ensure accurate aim at barcodes, equipped with a thin laser aim.



Touch-2-activate

the barcode reading



Micro USB port

(with protective cover)



# v1 MS650 Specifications

## Operational & Performance

Sensor	Linear Image Sensor
Scan Rate	400 Scans/Sec
Resolution	4mil/ 0.1mm
Scan Angle	41°
Print Contrast Ratio	30%
Light Source	Red Laser beam with enhanced white LED
Width of Field	130mm (13Mil Code39)
Memory	2MB
	Stores up to 150.000 barcodes / EAN-13 barcodes. (Storage depends on barcode length).

## Enclosure

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

## Reading distance (DOF)

(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

## 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

1D: 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

## 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)

## Power Source

Operation Voltage	3.7VDC ± 5%
Working Current	< 85mA
Standby Current	< 45mA
Power Down Current (Sleep Mode)	< 200uA
Battery	3.7V, 250mAh, Li-Polymer Battery
Number of Scan (per full charge)	6000 scans (1 scan/ 5 secs, BT connected)

## Regulatory 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

## Unitech Europe

Tilburg, The Netherlands

• Tel.: +31 (0)13 460 9292

• Email: [Info@eu.ute.com](mailto:Info@eu.ute.com)

• Website: <http://www.eu.ute.com>



# unitech

because we care

Unitech America

Unitech Asia Pacific

Unitech China

Unitech Europe

Unitech Japan

Unitech Taiwan

\* General warranty: Unitech reserves the right to call back the defect units at her discrete sole decision if Unitech may find it necessary. Upon the calling, the returning shipping cost will be borne by Unitech except tax and duty if any. Unitech has full decision to stop the warranty coverage before expiration if the defect is found due to abused, sabotage, and/or caused by the acts of God Specifications subject to change without notice.

\* NO Hassle Warranty: In case of defect during its valid warranty period, customer can simply register the defect symptom and serial number of the unit at Unitech portal. Unitech's logistic partner or service centre will send a replacement unit to the customer. The customer does not need to return the defect unit\*.