

# The “Smart” Wand

## Model MSH-220/230/240

### *Features*

- ◆ *Internal decoder and interface*
- ◆ *Auto-discriminates among major bar code symbologies*
- ◆ *Optional LED indicator light; optional On/Off switch*
- ◆ *Entirely replaceable ruby ball tip & cable*
- ◆ *Bar code menu programmable*



### **Built-In Decoder**

The MSH-220/230/240 “Smart” Wand has a built in decoder which eliminates the need for a separate decoder box. It is simple to program to match your specific application. Available with an assortment of connectors, Opticon wands may be configured for use with PC or laptop (RS232 only) computers.

### **Easy to Maintain**

The MSH-220/230/240 has a durable ruby ball tip and rugged cable construction. Easy to service, the wand tip and cable can be removed and replaced without any special tooling. The MSH-220/230/240’s versatile design also reads a wide range of bar codes, including marginal quality dot matrix labels in direct sunlight or under strong fluorescent lighting.

### **The Bottom Line**

The competitively priced MSH-220/230/240 eliminates the cost and clutter of a separate decoder box!



# TECHNICAL DATA

MSH-220/230/240 REV. 10/98

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

## Optical

Illumination	
Wavelength	Red, $\lambda = 660$ nm
Resolution	5 mil (min.)
Tilt Angle	35° max.
Depth of Field	Contact scanner
Print Contrast Ratio	0.35 min.
Scan Velocity	2 to 60 inches/second
Ambient Light Rejection	100 kilolux sunlight; 2 kilolux fluorescent

## Electrical

Supply Voltage	4.5 to 5.5 VDC
Operating Current	Less than 90 mA
Standby Current	Less than 20 mA

## Environmental

Temperature	
Operating	0 to +49° C (+32 to +120° F)
Storage	-9 to +71° C (+15 to +160° F)
Operating Humidity	up to 90% non-condensing

## Physical

Case Material	Polycarbonate
Dimensions	159 x 32 x 19 mm (6.25 x 1.25 x 0.75 in)
Weight	85 g (3 oz.)
Tip	Synthetic ruby ball

## Accessories

Part Number	Description
28-WAND2-01	Desktop stand
61-MSH02-01	Ruby ball wand tip replacement
32-00532-02	Power Supply; 120V AC to 5V DC
41-PAT06-01	Patch Cable; DB25M to DB9F w/5V Connector
41-PAT07-01	Patch Cable; DB25M to DB25F w/5V Connector
41-W0001-01	Y Cable /AT
41-W0002-01	Y Cable /PS2
25-WEDGE-04	Manual /Wedge
25-MSH23-01	Manual /RS232

## Warranty

Five (5) years, including parts & workmanship. Extended service contracts available.

## Technical Support / Sales

Opticon's experienced, well trained technical staff are available to answer questions and assist you in every way possible in support of our products. Call today to find out how the scanner can be adapted to your design: **(800) 636-0090**, or visit our web site at: **www.opticonUSA.com**

## Standard Pin-outs

### RS232C (DB25F)

Pin	Function
1	FGnd
2	RX
3	TX
4	CTS
5	RTS
7	SGND
25	+5V

### Wedge (DB9M)

Pin	Function
1	SGnd
2	FGnd
3	+5V
5	CP CK
6	KB CK
7	KB DA
9	CP DA

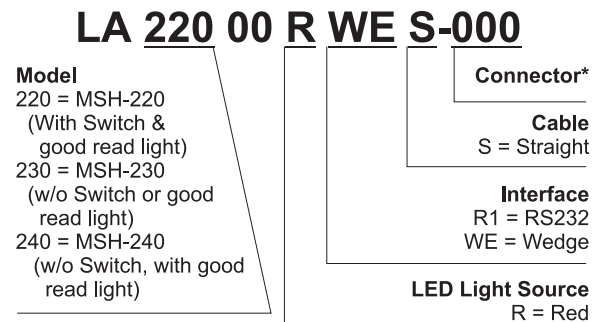
## Decodable Symbologies

WPC: EAN, JAN, UPC  
Code 39  
Standard 2of5  
Interleaved 2of5  
Code 128  
Code 93  
MSI/Plessey

## Interface Options

RS232C	Asynchronous Serial Output
WEDGE	Keyboard Emulation

## Ordering Information



\* Ask our customer service department for assistance in selecting the connector that best suits your needs.



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