

Bar Code Wand

Model MSH-115/119

Features

- ◆ *Reads laminated bar codes (MSH-115)*
- ◆ *Rugged and durable case*
- ◆ *Double spiraled, high-flex cable*
- ◆ *Spring loaded, ruby ball tip*
- ◆ *Reads all bar code symbologies*
- ◆ *Operates in extreme temperatures*
- ◆ *High depth-of-field (MSH-115)*



Toughest Wand Available

The MSH-115/119 is built to take a real beating. Experience shows that cables are the most vulnerable part of a bar code wand. Our double-spiraled, "High-Flex" cable greatly reduces failure rates. This durable cable is designed to withstand 2 million 90° bends with a one pound weight.

A wand tip must scan millions of labels and withstand accidental drops to the floor. The MSH-115/119's synthetic ruby ball tip is second only to diamond in hardness and is spring loaded to dampen impact. Self-cleaning, the ruby ball tip assures consistent read performance by protecting the optics from dust and dirt. The extruded, seamless, stainless steel case withstands harder knocks at the workstation than competitive wand cases.

Performs in Extreme Weather

The MSH-115/119 is designed to operate in any environment, from -5 to +120° F. Opticon's wide temperature range may mean the difference between a working or nonworking bar code wand in extreme weather conditions.

Reads Under Intense Sunlight

A special optical bandpass and electrical filter ensures that the MSH-115/119 will read bar codes in direct sunlight or under strong fluorescent lighting.

Ideal General Purpose Wand

The MSH-115/119 is designed to read the widest range of bar codes, including both marginal quality dot matrix and high density labels. Opticon wands are available with an assortment of connectors that adapt to your existing hardware.



TECHNICAL DATA

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

MSH-115/119 REV. 10/98

Optical

Illumination	
Wavelength	Red ($\lambda = 660 \text{ nm}$) Infrared ($\lambda = 940 \text{ nm}$)
Resolution	4, 6, 7.5, 10 and 15 mils
Tilt Angle	50°
Depth of Field	MSH 115 = 0 to 50 mils (1.25 mm) MSH 119 = 0 to 40 mils (1.0 mm)
Print Contrast Ratio	0.3
Scan Velocity	MSH 115 = 4 to 40 in/sec.
(7.5 mil label)	MSH 119 = 2 to 80 in/sec.
Ambient Light	3 kilolux fluorescent light;
Rejection	30 kilolux incandescent

Electrical

Supply Voltage	5VDC (typ.)
Current	
Operating	20 mA nominal
Standby	0.3 mA (LED off)
Digital Output	Open collector; Black=high logic level
ESD	50 discharges max. /15KV
Shield Isolation	10 M Ω
Grounds	Separate case and signal grounds

Environmental

Temperature	
Operating	-20 to +49° C (-5 to +120° F)
Storage	-30 to +70° C (-22 to +158° F)
Operating Humidity	0 to 95% non-condensing

Physical

Case Material	Extruded Stainless Steel
Dimensions	5.5 x 0.5" (diam.)
Weight	100 g (3.5 ounces) w/o cable
Tip	Synthetic ruby ball
Cable Length	10 ft. nominal

Accessories

Part No.	Description
28-WAND1-01	White desktop stand

Warranty

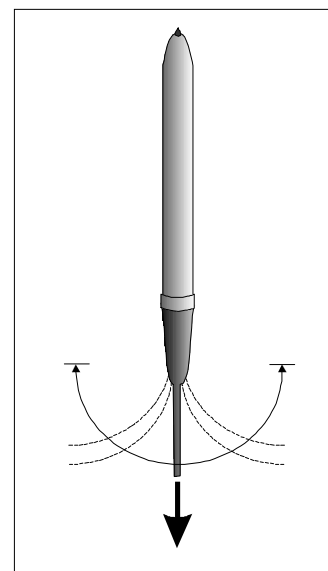
Five (5) years, including parts & workmanship. Extended service contracts available.

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

Durability

Shock	No damage after 5 foot drop from any position onto concrete surface.
Cable	Withstands over 2 million 90° angle bends at 1 pound tension →



Standard Pin-outs

Pin #	Function
1	+5 V
3	TTL Data
4	Ground

Custom options include separate LED enable input.

Ordering Information

LA 119 18 R 00 C-028

Model

115 = MSH-115
(Reads laminates)
119 = MSH-119
(Reads paper labels)

Resolution

10 = 4 mil (0.10 mm)
15 = 6 mil (0.15 mm)
18 = 7.5 mil (0.18 mm)
25 = 10 mil (0.25 mm)
40 = 15 mil (0.40 mm)

Connector*

028 = DB9F
Squeeze
002 = 5-Pin DIN

Cable

C = Coiled

Interface

00 = Undecoded

LED Light Source

R = Red

I = Infrared

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



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