INDUSTRIAL

Metrologic®
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MS1890 **Focus**®

**Metrologic's MS1890 Focus indus-
trial-grade area imager featuring
patented First*Flash*® technology provides
unmatched scanning performance in
challenging environments.**

Metrologic's MS1890 Focus maximizes
productivity with a set of features previously
unavailable in rugged area imagers.

Engineered to withstand two-meter falls,
this IP54-rated omnidirectional imager
precisely executes applications for retail
back-of-store, manufacturing, transportation
and logistics. It excels in punishing locales
such as: dusty warehouses, steamy
storerooms, rainy loading docks and
freezing distribution centers.

The MS1890 Focus outperforms the field
in decoding all standard bar codes in
a single flash with minimal concern for
orientation or print quality. It reads codes
damaged, worn or wrapped in clear plastic.

The MS1890 Focus further separates itself
with patented Code*Select*™ technology

which allows the imager to capture up to
seven bar codes in a single flash and then
decode them in any pre-determined order.

Total*Freedom*™, an open system
architecture, is also available with the
MS1890. Total*Freedom* offers unlimited
possibilities for developing value-added
custom application modules embedded
directly into the imager instead of the host
system.

For image-capture applications, the
MS1890 Focus provides a wide array of
outputs by combining a high-resolution
imaging sensor with a powerful processor.

With its arsenal of features and an all-
inclusive kit, the MS1890 Focus is the
all-in-one scanner built to meet the needs
of any demanding environment.

www.metrologic.com/MS1890

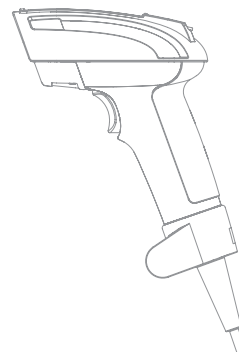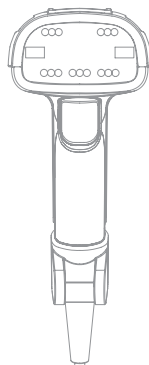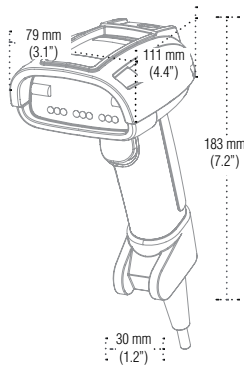| Features	Benefits
• IP54-rated	Withstands exposure to dust and splashing water
• First*Flash*™	Increases productivity by scanning all standard bar codes on first LED flash
• Code*Select*™	Scans up to 7 bar codes in one scan and outputs data in any pre-determined order
• Omnidirectional scanning	Eliminates need to orientate device to bar code
• Durable metal hook	Creates safer working conditions by attaching to universal tether

MS1890

Dimensions: 79 mm (3.1"), 111 mm (4.4"), 183 mm (7.2"), 30 mm (1.2")

OPERATIONAL

Light Source	LED 645nm ± 7.5 nm
Decode Capability	Autodiscriminates all standard 1D, GS1 DataBar™, PDF417, microPDF, MaxiCode, Data Matrix, QR Code, UCC, EAN Composites, Postals, Aztec
System Interfaces	PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB, IBM
Beeper Operation	7 tones or no beep
Indicators (LED)	Blue=unit powered, ready to scan; White=good read

MECHANICAL

Height	183 mm (7.2")
Depth	111 mm (4.4")
Width	Handle - 30 mm (1.2"); Head - 79 mm (3.1")
Weight	284 g (10 oz)
Termination	10 pin modular RJ45
Cable	Standard 2.7 m (9') coiled; optional 2.1 m (7') straight

ELECTRICAL

Input Voltage	5 V
Power	Operating: 2 W (peak); Standby: 800 mW
Current	Operating: 400 mA (peak); Standby: 160 mA
DC Transformers	5 V @ 1 A
LED Class	Class 1; IEC60825-1:1993/A1:1997+A2:2001 Class 1; EN60825-1:1994/A11:1996+A2:2001
EMC	FCC Class A, IEC60825-1 LED Safety
ESD Protection	Functional after 100 15kV discharges
LED Protection	Functional after 100 15 kV discharges

ENVIRONMENTAL

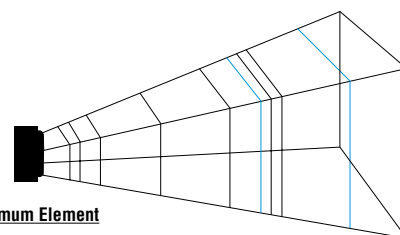|	
Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)
Humidity	0% to 95% relative humidity, non-condensing
Light Levels	Up to 100,000 Lux (9,290 footcandles)
Shock	Designed to withstand multiple 2 m (6.6') drops to concrete
Contaminants	Protected against dust and splashing water
IP Rating	IP54

Product Colors Available		
	Orange	MS1890 is available in a variety of other colors with minimum quantity purchase.

SCAN PERFORMANCE

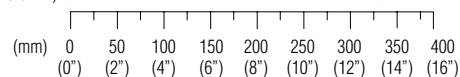|	
Depth of Scan Field (programmable)	0 mm - 300 mm (0" - 11.81") for 0.33 mm (13 mil) bar codes
Width of Scan Field	49 mm W x 19 mm H (1.9" W x 0.8" H) @ 20 mm (0.8"); 264 mm W x 106 mm H (10.4" W x 4.2" H) @ 280 mm (11")
Minimum Element Width	1D: 0.127 mm (5 mil); 2D: 0.254 mm (10 mil)
Image Resolution	1280 x 512 pixels
Print Contrast	20% minimum reflectance difference
Pitch, Skew	75°, 75°

Scan Area

Bar Code Minimum Element
1D
0.132 mm (5.2 mil)
0.190 mm (7.5 mil)
0.264 mm (10.4 mil)
0.330 mm (13 mil)
0.533 mm (21 mil)
PDF
0.254 mm (10 mil)
0.381 mm (15.9 mil)

(mm) 0 (0") 50 (2") 100 (4") 150 (6") 200 (8") 250 (10") 300 (12") 350 (14") 400 (16")

RoHS 2002/95/EC Revision: All   CE   cULus LISTED   Sunrise 2005 Compliant   ISO 9001:2000

DS1890