

MS9500 SERIES **VOYAGER®**

PRODUCT GUIDE

Single Line, Hand-Held,
1D, High-Density 1D,
PDF-417 2D and Wireless
Laser Bar Code Scanners

9524 - 9544



9535



9521 - 9541



9520 - 9540



Contents

About Voyager® Scanners	1
Voyager Selection Chart	2
MS9520 Voyager	3
MS9540 VoyagerCG®	3
MS9535 VoyagerBT™	4
MS9524 VoyagerPDF™	5
MS9544 VoyagerPDF™	5
MS9521 VoyagerHD™	6
MS9541 VoyagerHD™	6
Options and Accessories	7
MetroSet®2 Software Utility	8
Specifications	9-10



Voyager® Selection Chart

Metrologic's Voyager® family is a diverse group of single-line, hand-held, laser bar code scanners with features for virtually every requirement from decoding standard 1D bar codes to wireless applications. Specific Voyager models incorporate Metrologic's proprietary CodeGate technology, scan 2D (PDF) or high density bar codes. Whatever your needs, Voyager is the right scanner for you.

ALL VOYAGER MODELS FEATURE:

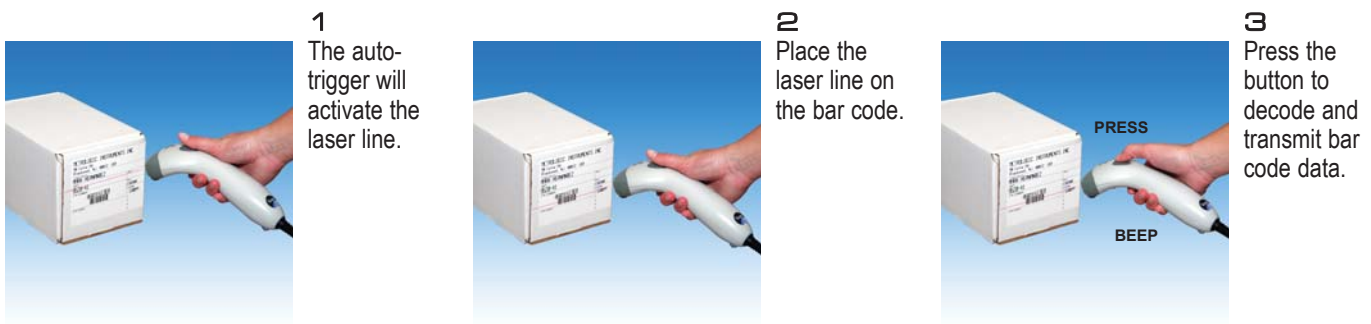
- ✓ Sunrise 2005 Compliant
- ✓ Complete Kits Standard
- ✓ User-replaceable Detachable Cables
- ✓ Decodes all standard 1D, RSS-14, RSS Limited and RSS Expanded bar code
- ✓ Flash ROM Upgrades
- ✓ Custom Edit Bar Codes
- ✓ Supports Common Interfaces
- ✓ Auto Activation Mode (hands-free)

 MS9520 Voyager®  MS9540 VoyagerCG® with CodeGate Page 3	STANDARD
 MS9535 VoyagerBT™ with CodeGate Page 4	WIRELESS
 MS9524 VoyagerPDF™  MS9544 VoyagerPDF™ with CodeGate Page 5	2D BAR CODES
 MS9521 VoyagerHD™  MS9541 VoyagerHD™ with CodeGate Page 6	HIGH DENSITY BAR CODES

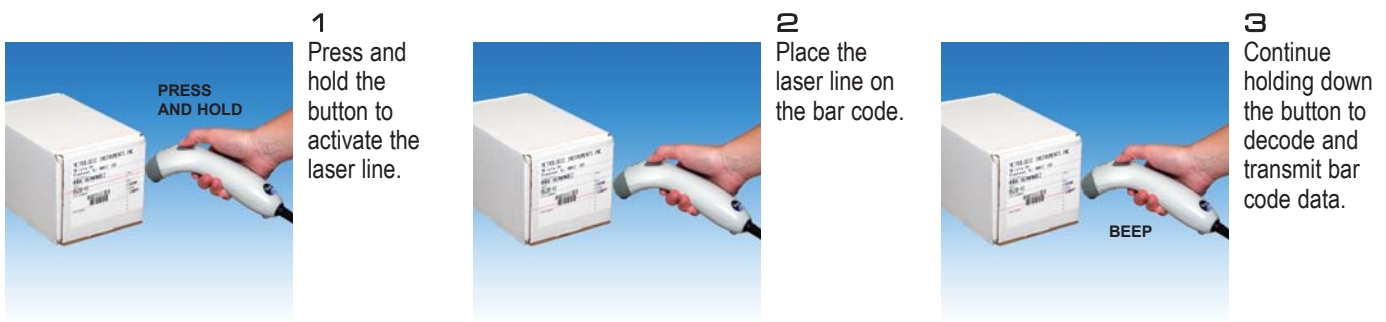
In Stand, Auto Trigger - CodeGate and Non CodeGate Models



Out-of-Stand - CodeGate Models



Out-of-Stand, Manual Activation - CodeGate Models



Out-of-Stand, Auto Trigger - Non CodeGate Models and CodeGate Models with CodeGate Feature Deactivated



MS9520 Voyager® & MS9540 VoyagerCG®

Voyager

Voyager and VoyagerCG are auto-trigger, single-line laser bar code scanners designed for decoding all standard 1D bar codes, including RSS codes. Their sleek, futuristic designs certainly catch your attention. But looks get you only so far, its performance and value that really count. It is here that Voyager excels and sets new industry standards.

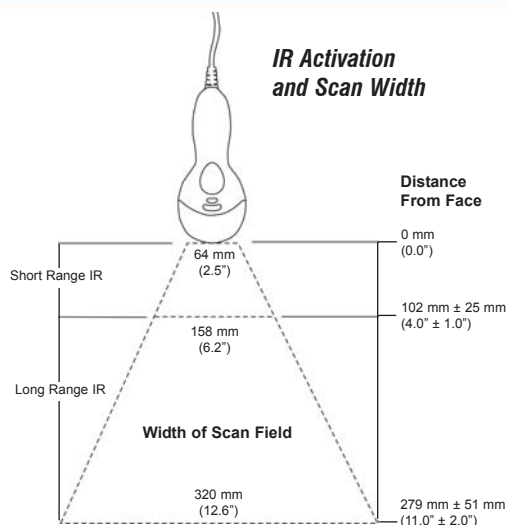
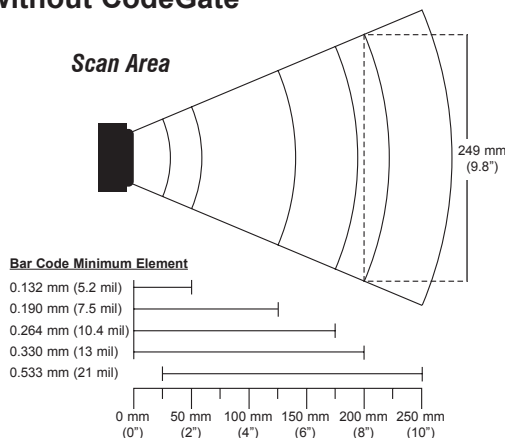
Features

- Automatic trigger
 - Decodes all standard 1D, RSS-14, RSS Limited, and RSS expanded bar codes
 - User-replaceable, single cable interface to host
 - Adjustable stand
- Model MS9540 Only
- CodeGate data transmission technology



Sunrise 2005 Compliant

SCANS 1D BAR CODES with or without CodeGate



quick specs

Depth of Field 0 mm - 203 mm (0" - 8") for 0.33 mm (13 mil) bar codes

Width of Field 64 mm (2.5") @ face; 249 mm (9.8") @ 203 mm (8.0")

Scan Speed 72 ± 2 scan lines per second

Scan Pattern Single scan line

Minimum Bar Width 0.127 mm (5.0 mil)

Dimensions 198 mm (7.8") H x 40 mm (1.6") D x Handle Width: 45 mm (1.8") Head Width: 78 mm (3.1")

Interfaces PC Keyboard Wedge, RS232, OCIA, Light Pen Emulation, IBM 468X/469X, Stand Alone Keyboard, USB (low speed and full speed)

Light Source Visible Laser Diode 650 nm ± 10 nm

Weight 149 g (5.25 oz)

Shock Designed to withstand 1.5 m (5') drops

MS9535 Voyager BT™

Voyager

Metrologic's VoyagerBT offers convenience and the freedom of mobility by incorporating Bluetooth wireless technology into a Voyager Series scanner. VoyagerBT provides a lightweight, comfortable, and easy to use scanning solution with unmatched standard features.

Features

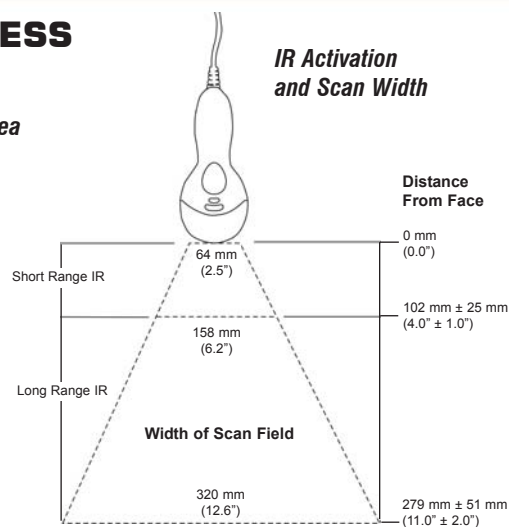
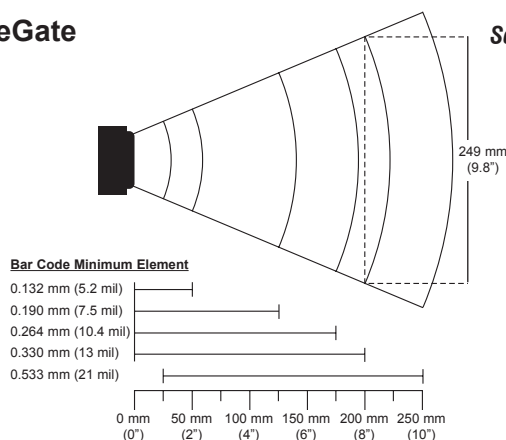
- Cable-free scanning using Bluetooth® technology
- CodeGate® data transmission ideal for menu scanning
- Up to 12,000 scans per charge
- Adjustable volume and beeper tone
- Recharging base station with in base scanning
- Wall or countertop mounting
- 10 meter (33') working range
- Two way communication - user receives audible and visual confirmation of each scan
- Scanner locator button on cradle



Sunrise 2005 Compliant

SCANS 1D BAR CODES USING WIRELESS BLUETOOTH TECHNOLOGY

with CodeGate



quick specs

Depth of Field	0 mm - 203 mm (0" - 8") for 0.33 mm (13 mil) bar codes
Width of Field	64 mm (2.5") @ face; 249 mm (9.8") @ 203 mm (8.0")
Scan Speed	72 ± 2 scan lines per second
Scan Pattern	Single scan line
Minimum Bar Width	0.127 mm (5.0 mil)
Dimensions	Scanner: 198 mm (7.8") H x 40 mm (1.6") D x Handle Width: 45 mm (1.8") Head Width: 78 mm (3.1") Base: 61 mm (2.4") H x 204 mm (8.0") D x 107 mm (4.2") W
Interfaces	PC Keyboard Wedge, RS232, IBM 468X/469X, Stand Alone Keyboard, USB (low speed and full speed)
Light Source	Visible Laser Diode 650 nm ± 10 nm
Weight	Scanner (with battery): 199 g (7.0 oz); Base: 225 g (7.9 oz)
Shock	Designed to withstand 1.5 m (5') drops

MS9524 VoyagerPDF™ & MS9544 VoyagerPDF™

Voyager

Metrologic's MS9524 and MS9544 VoyagerPDF scanners offer the same outstanding performance found in all Voyager Series scanners. What differentiates the VoyagerPDF scanners is the ability to decode 2D codes such as PDF417, PDF417 truncated, micro PDF, macro PDF and RSS-14 composite bar code symbologies.

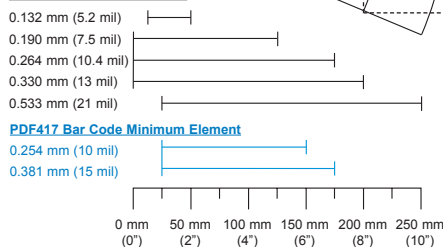
Features

- Decodes 1D & 2D (including RSS, PDF417, PDF417 truncated, micro PDF and macro PDF) bar codes
 - Automatic trigger operation
 - 180 scans per second
 - Auto stand detect
- Model MS9544 Only
- CodeGate® data transmission technology

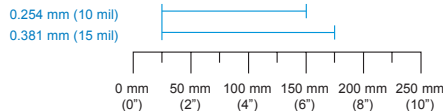


SCANS 1D AND PDF-417 (2D) BAR CODES with or without CodeGate

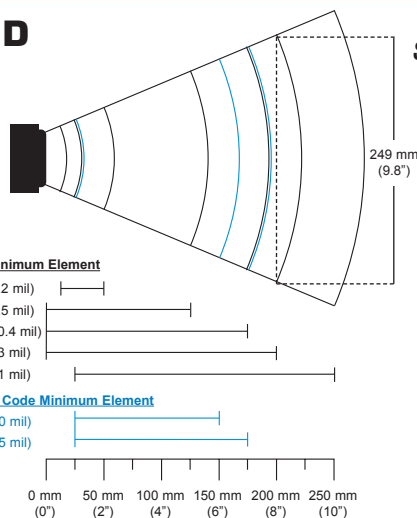
Bar Code Minimum Element



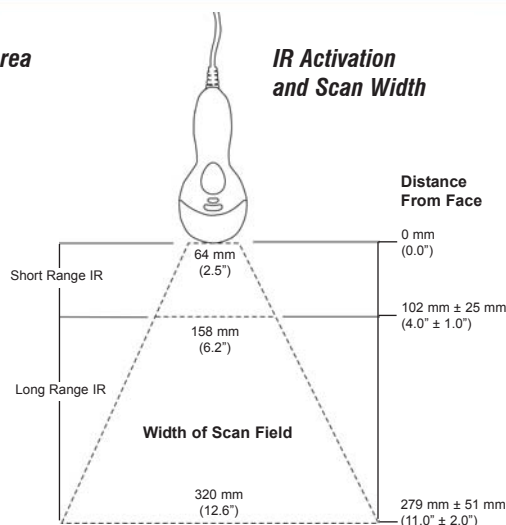
PDF417 Bar Code Minimum Element



Scan Area



IR Activation and Scan Width



quick specs

Depth of Field	0 mm - 203 mm (0" - 8") for 0.33 mm (13 mil) bar codes
Width of Field	64 mm (2.5") @ face; 249 mm (9.8") @ 203 mm (8.0")
Scan Speed	180 ± 10 scan lines per second
Scan Pattern	Single scan line
Minimum Bar Width	0.127 mm (5.0 mil)
Dimensions	198 mm (7.8") H x 40 mm (1.6") D x Handle Width: 45 mm (1.8") Head Width: 78 mm (3.1")
Interfaces	PC Keyboard Wedge, RS232, OCIA, Light Pen Emulation, IBM 468X/469X, Stand Alone Keyboard, USB (low speed and full speed)
Light Source	Visible Laser Diode 650 nm ± 10 nm
Weight	149 g (5.25 oz)
Shock	Designed to withstand 1.5 m (5') drops

MS9521 VoyagerHD™ & MS9541 VoyagerHD™

Voyager

Metrologic's MS9521 and MS9541 VoyagerHD

are high performance single line laser bar code scanner capable of scanning high density (3 mil) bar codes.

Features

- Decodes high density bar codes with a minimum width of 0.076 mm (3.0 mil), as well as all standard 1D, RSS-14, RSS Limited and RSS expanded bar codes
 - Automatic trigger operation
 - Custom edit the bar code data
 - User-replaceable, single cable interface to host
- Model MS9541 Only
- CodeGate® data transmission technology

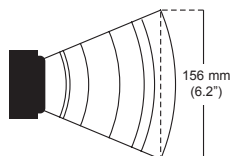


Sunrise 2005 Compliant

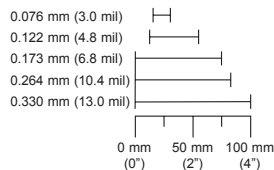
SCANS HIGH-DENSITY 1D BAR CODES

with or without CodeGate

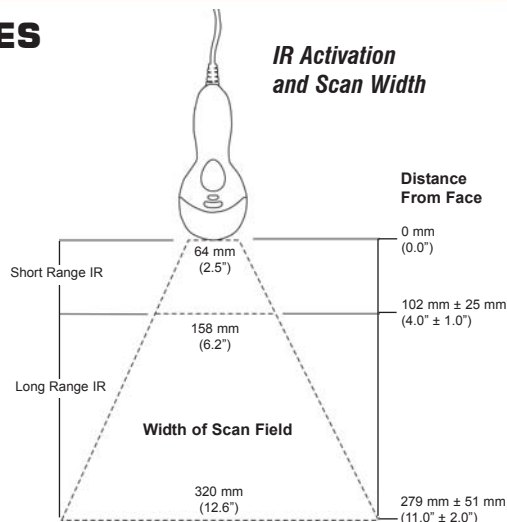
Scan Area



Bar Code Minimum Element



IR Activation and Scan Width



quick specs

Depth of Field	0 mm - 102 mm (0" - 4") for 0.33 mm (13 mil) bar codes; 15 mm - 35 mm (0.6" - 1.4") for 0.076 mm (3.0 mil) bar codes
Width of Field	64 mm (2.5") @ face; 157 mm (6.2") @ 102 mm (4.0")
Scan Speed	72 ± 2 scan lines per second
Scan Pattern	Single scan line
Minimum Bar Width	0.076 mm (3.0 mil)
Dimensions	198 mm (7.8") H x 40 mm (1.6") D x Handle Width: 45 mm (1.8") Head Width: 78 mm (3.1")
Interfaces	PC Keyboard Wedge, RS232, OCIA, Light Pen Emulation, IBM 468X/469X, Stand Alone Keyboard, USB (low speed and full speed)
Light Source	Visible Laser Diode 650 nm ± 10 nm
Weight	149 g (5.25 oz)

MS9500 Series Voyager® Options and Accessories



Voyagers

are available in two standard colors Light Grey and Black.

They are also available in a variety of other colors with minimum quantity purchase.



Optional Wall Mount

shown with
MS9540 **VoyagerCG**
(scanner sold
seperately)

Optional VoyagerBT Presentation Stand

shown with
MS9535 **VoyagerBT**
(scanner sold
seperately)



Standard Stand Mounting Hardware

Included in all
MS9500 Series Kits
- except MS9535

shown with
MS9541 **VoyagerHD**



Optional Charger Only Cradle

for applications
where the scanner
communicates directly
with another
Bluetooth device



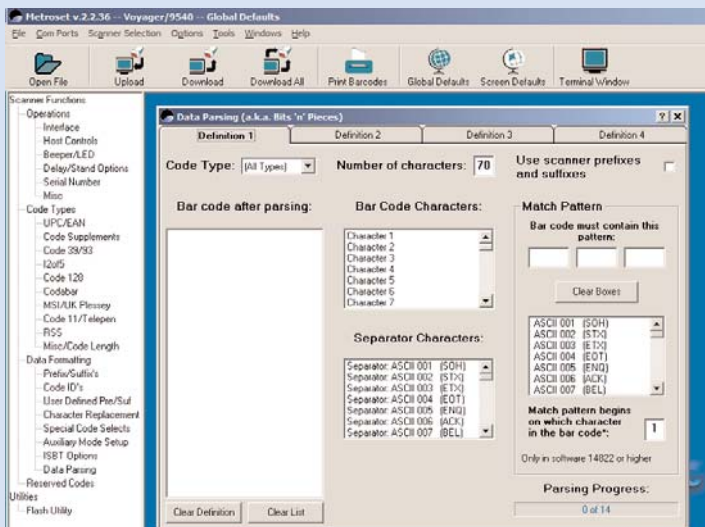
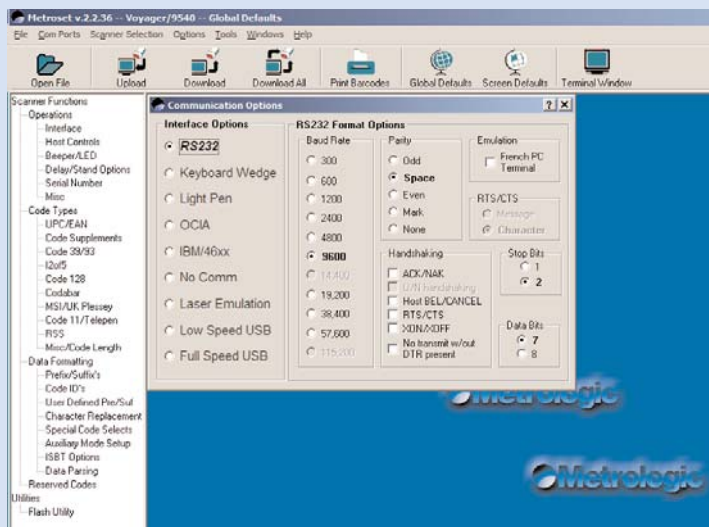
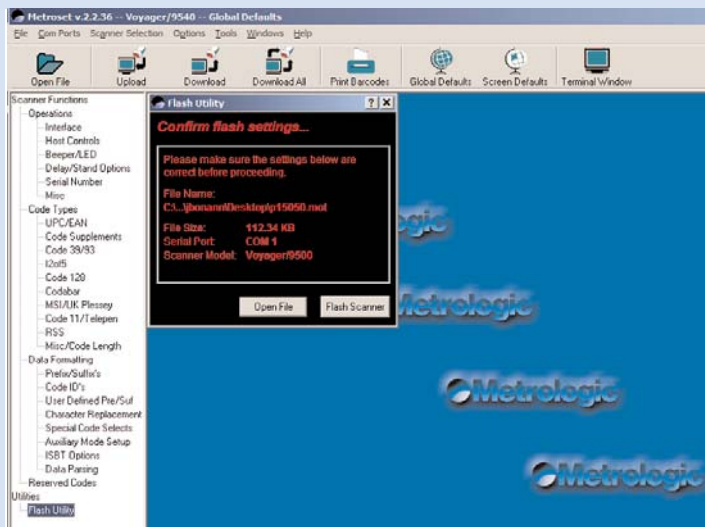
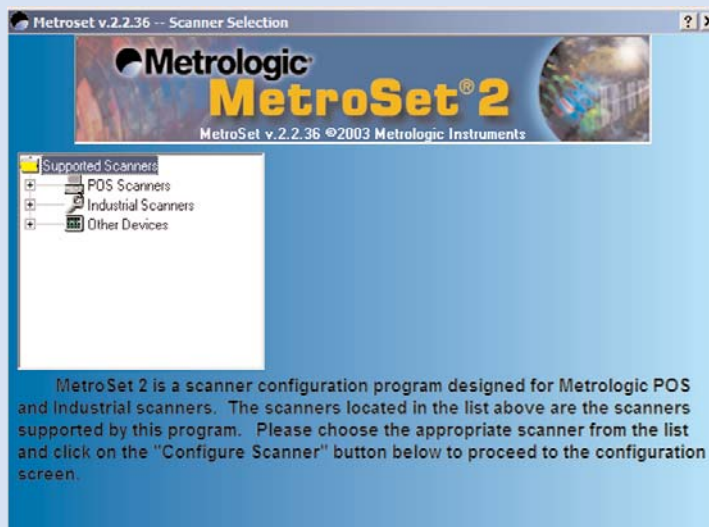
MetroSet®2 Software Utility

MetroSet®2 is a graphical programming utility that provides users with a Windows based tool for programming, formatting and flashing Metrologic POS and Industrial Scanners.

Simply select the scanner type from the list provided and enter MetroSet 2 to begin programming. Users can upload their current settings and easily make changes to create a custom configuration. This file can then be saved and used to program multiple scanners, assuring they all have the same configuration.

Bits n' Pieces is an easy to use data formatting utility designed to give users maximum flexibility when integrating with a host system.

Also included in MetroSet 2 is a Flash Utility that allows users to upgrade firmware by simply selecting the file and clicking the "Flash Scanner" button. Customers can receive new firmware from Metrologic's Technical Support Department by calling 1-800-ID-METRO.



The Voyager® Family of Scanners

Standard Voyager Colors



Voyagers are available in a variety of other colors with minimum quantity purchase



OPERATIONAL

Light Source	Visible Laser Diode 650 nm $\pm$ 10 nm	Visible Laser Diode 650 nm $\pm$ 10 nm
Laser Power	0.96 mW (peak)	0.96 mW (peak)
Depth of Scan Field (program)	0 mm - 203 mm (0" - 8") for 0.33 mm (13 mil) bar codes	15 mm - 35 mm (0.6" - 1.4") for 0.076 mm (3 mil) bar codes
Width of Scan Field	64 mm (2.5") @ face; 249 mm (9.8") @ 203 mm (8.0")	64 mm (2.5") @ face; 157 mm (6.2") @ 102 mm (4.0")
Scan Speed	72 $\pm$ 2 scan lines per second	72 $\pm$ 2 scan lines per second
Scan Pattern	Single scan line	Single scan line
Minimum Bar Width	0.127 mm (5.0 mil)	0.076 mm (3.0 mil)
Decode Capability	Autodiscriminates all standard 1D bar codes, including RSS, for other symbologies call Metrologic	Autodiscriminates all standard 1D bar codes, including RSS, for other symbologies call Metrologic
System Interfaces	PC Keyboard Wedge, RS232, OCIA, Light Pen Emulation, Non-decode Emulation, IBM 468X/469X, Stand Alone Keyboard, USB (low speed and full speed)	PC Keyboard Wedge, RS232, OCIA, Light Pen Emulation, Non-decode Emulation, IBM 468X/469X, Stand Alone Keyboard, USB (low speed and full speed)
Print Contrast	35% minimum reflectance difference	35% minimum reflectance difference
Number Characters	Up to 80 data characters	Up to 80 data characters
Roll, Pitch, Yaw	42°, 68°, 52°	42°, 68°, 52°
Beeper Operation	7 tones or no beep	7 tones or no beep
Indicators (LED)	Green=laser on, ready to scan; yellow=auto trigger mode active; red=good read	Green=laser on, ready to scan; yellow=auto trigger mode active; red=good read
Profile Support	N/a	N/a
Bluetooth Version	N/a	N/a
Height	198 mm (7.8")	198 mm (7.8")
Depth	40 mm (1.6")	40 mm (1.6")
Width	Handle - 45 mm (1.8"); Head - 78 mm (3.1")	Handle - 45 mm (1.8"); Head - 78 mm (3.1")
Weight	149 g (5.25 oz)	149 g (5.25 oz)
Termination	10 pin modular RJ45	10 pin modular RJ45
Cable	Standard 2.7 m (9') coiled; optional 2.1 m (7') straight	Standard 2.7 m (9') coiled; optional 2.1 m (7') straight
Input Voltage	5 VDC $\pm$ 0.25 V	5 VDC $\pm$ 0.25 V
Power - Operating	500 mW	500 mW
Power - Standby	110 mW	110 mW
Current - Operating	100 mA typical @ 5 VDC	100 mA typical @ 5 VDC
Current - Standby	22 mA typical @ 5 VDC	22 mA typical @ 5 VDC
DC Transformers	Class 2; 5.2 VDC @ 650 mA	Class 2; 5.2 VDC @ 650 mA
Laser Class	Laser Class 1 In accordance with IEC 60825-1:1993+A1:1997+A2:2001 and EN 60825-1:1994+A11:1996+A2:2001	Laser Class 1 In accordance with IEC 60825-1:1993+A1:1997+A2:2001 and EN 60825-1:1994+A11:1996+A2:2001
EMC	FCC, ICES-003 & EN55022 Class B	FCC, ICES-003 & EN55022 Class B
Current Charging	N/a	N/a
Recharge Time	N/a	N/a
Battery Capacity	N/a	N/a
Radio Range	N/a	N/a
Frequency	N/a	N/a
Operating Temperature	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
Humidity	5% to 95% relative humidity, non-condensing	5% to 95% relative humidity, non-condensing
Light Levels	Up to 4842 Lux (450 footcandles)	Up to 4842 Lux (450 footcandles)
Shock	Designed to withstand 1.5 m (5') drops	Designed to withstand 1.5 m (5') drops
Contaminants	Sealed to resist airborne particulate contaminants	Sealed to resist airborne particulate contaminants

HD™ R CODES	MS9524 & MS9544 VoyagerPDF™ SCANS 1D AND PDF417 (2D) BAR CODES - with or without CodeGate	MS9535 VoyagerBT™ SCANS 1D BAR CODES, WIRELESS BLUETOOTH TECHNOLOGY - with CodeGate
	Visible Laser Diode 650 nm $\pm$ 10 nm	Visible Laser Diode 650 nm $\pm$ 10 nm
	0.96 mW (peak)	0.96 mW (peak)
	0 mm - 203 mm (0" - 8") for 0.33 mm (13 mil) bar codes 64 mm (2.5") @ face; 249 mm (9.8") @ 203 mm (8.0")	0 mm - 203 mm (0" - 8") for 0.33 mm (13 mil) bar codes 64 mm (2.5") @ face; 249 mm (9.8") @ 203 mm (8.0")
	180 $\pm$ 10 scan lines per second	72 $\pm$ 2 scan lines per second
	Single scan line	Single scan line
	0.127 mm (5.0 mil)	0.127 mm (5.0 mil)
	Autodiscriminates all standard 1D and 2D bar codes, including RSS-14, PDF417, truncated PDF417, micro PDF and macro PDF, for other symbologies call Metrologic	Autodiscriminates all standard 1D bar codes, including RSS, for other symbologies call Metrologic
Non-decode Low speed and full speed)	PC Keyboard Wedge, RS232, OCIA, Light Pen Emulation, Non-decode Emulation, IBM 468X/469X, Stand Alone Keyboard, USB (low speed and full speed)	PC Keyboard Wedge, RS232, Light Pen Emulation, Stand Alone Keyboard, USB (low speed and full speed)
	35% minimum reflectance difference	35% minimum reflectance difference
	Up to 80 data characters on 1D; 1850 text characters on PDF417	Up to 80 data characters
	42°, 68°, 52°	42°, 68°, 52°
	13 tones or no beep	7 tones or no beep
Active; red=good read	Blue=laser on, ready to scan; yellow=auto trigger mode active; white=good read	Blue=laser on, ready to scan; yellow=auto trigger mode active; white=good read
	N/a	Serial Port Profile (SPP)
	N/a	v1.1 compliant
	198 mm (7.8")	Scanner: 198 mm (7.8"); base: 204 mm (8.0")
	40 mm (1.6")	Scanner: 40 mm (1.6"); base: 61 mm (2.4")
	Handle - 45 mm (1.8"); Head - 78 mm (3.1")	Scanner handle: 45 mm (1.8"), scanner head: 78 mm (3.1"); base: 107 mm (4.2")
	149 g (5.25 oz)	Scanner (with battery) 199 g (7.02 oz); base: 225 g (7.94 oz)
	10 pin modular RJ45	Base: 10 pin modular RJ45
	Standard 2.7 m (9') coiled; optional 2.1 m (7') straight	Base: 2.1 m (7') straight
	5.2 VDC $\pm$ 0.25 V	Base: 5.2 VDC $\pm$ 0.25 V
	1500 mW	Base: 0.6 W (typical); 1.4 W (max)
	750 mW	Base: 0.6 W
	300 mA typical @ 5.25 VDC	Scanner: 230 mA (max) @ 5 VDC; base: 65 mA (max) @ 5 VDC
	100 mA typical @ 5.25 VDC	Scanner: 30 mA typical @ 5 VDC
	Class 2; 5.2 VDC @ 650 mW	Scanner: none; base: Class 2; 5.2 VDC @ 2 A
7 + A2:2001	Laser Class 1 In accordance with IEC 60825-1:1993 + A1:1997 + A2:2001 and EN 60825-1:1994 + A11:1996 + A2:2001	Laser Class 1 In accordance with IEC 60825-1:1993 + A1:1997 + A2:2001 and EN 60825-1:1994 + A11:1996 + A2:2001
	FCC, ICES-003 & EN55022 Class B	FCC, ICES-003 & EN55022 Class B
	N/a	2 A
	N/a	2.5 hours
	N/a	12,000 scans (max)
	N/a	10 m (33')
	N/a	2.4 - 2.48 GHz (frequency hopping)
	0°C to 40°C (32°F to 104°F)	0°C to 40°C (32°F to 104°F)
	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
	5% to 95% relative humidity, non-condensing	5% to 95% relative humidity, non-condensing
	Up to 4842 Lux (450 footcandles)	Up to 4842 Lux (450 footcandles)
	Designed to withstand 1.5 m (5') drops	Designed to withstand 1.5 m (5') drops
	Sealed to resist airborne particulate contaminants	Sealed to resist airborne particulate contaminants

Metrologic designs, manufactures and markets bar code scanning and high-speed automated data capture systems solutions using laser, holographic, camera and vision-based technologies. Metrologic offers expertise in 1D and 2D bar code reading, portable data collection, optical character recognition, image lift, and parcel dimensioning and singulation detection for customers in retail, commercial, manufacturing, transportation and logistics, and postal and parcel delivery industries. In addition to its extensive line of bar code scanning and vision system equipment, the company also provides laser beam delivery and control systems to semi-conductor and fiber optic manufacturers, as well as a variety of highly sophisticated optical systems. Metrologic products are sold in more than 110 countries worldwide through Metrologic's sales, service and distribution offices located in North and South America, Europe and Asia.

**Sales support and technical assistance
are available worldwide.**

View Metrologic data sheets, user/programming
guides, trade show schedules, and much more at:

Specifications subject to change without notice.
Printed U.S.A., Copyright July 2004
Metrologic, All rights reserved.

Switzerland • OPAL Associates AG • Motorenstrasse 116 • CH-8620 **Wetzikon** • Telefon +41 (0)44 931 12 22 • Telefax +41 (0)44 931 12 20 • Email info@opal-holding.com • URL <http://www.opal.ch/> • **OPAL Associates SA** • Avenue des Boveresses 54 • Case postale 29 • CH 1000 **Lausanne** 21 • Telefon +41 (0)21 653 95 00 • Telefax +41 (0)21 653 95 02 • Email info@opal-holding.com • URL <http://www.opalsa.ch/> •
Germany • OPAL Associates GmbH • Lohnerhofstrasse 2 • D-78467 **Konstanz** Telefon +49 (0)7531 813 000 • Telefax +49 (0)7531 813 00 99 • Email info@opal-holding.com • URL <http://www.opalgmbh.de/> • **OPAL Associates GmbH** • Osterholder Allee 2 • 25421 **Pinneberg** • Telefon +49 (0)4101 787 615 • Telefax +49(0)4101 787 616 • Email info@opal-holding.com • **OPAL Associates GmbH** • **München** • Telefon +49 (0)89 12737 556 • Telefax +49 (0)89 12737 557 • Email info@opal-holding.com • **OPAL Associates GmbH** • **Frankfurt** • Telefon +49 (0)69 8236 6501 • Telefax +49 (0)69 8236 7709 • Email info@opal-holding.com • **OPAL Solutions GmbH** • Wilhelmstr. 22 • 52428 **Jülich** • Telefon +49 (0)2461 936 770 • Telefax +49(0)2461 936 771 • Email info@opal-holding.com • URL <http://www.opal-solutions.de/> •
Austria • OPAL Associates GesmbH • Vorarlberger Wirtschaftspark • A-6840 **Götzis** • Telefon +43 (0) 5523 58833 • Telefax +43 (0)5523 521569 • Email info@opal-holding.com • URL <http://www.opalgmbh.at/> • **OPAL Associates GesmbH** • Donaufelderstr. 101/2/8 • **1210 Wien** • Telefon +43 (0)1 270 03 13 • Telefax +43(0)1 270 03 15 • Email info@opalgmbh.at

