

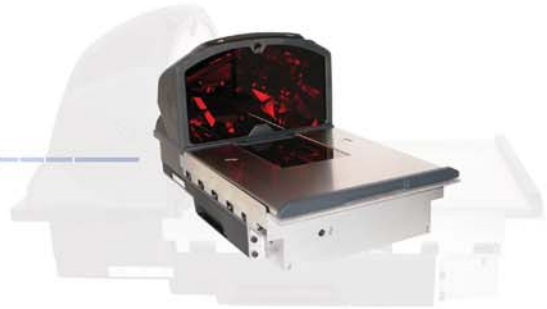
MS2xxx SERIES **Stratos®**

PRODUCT GUIDE

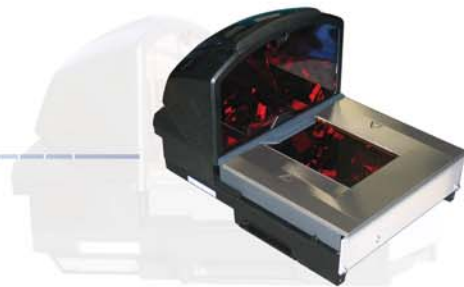
6-Sided, Bi-Optic,
High-Speed, Hi-Volume,
In-Counter Laser Bar Code Scanners

STRATOS SERIES

MS232x StratosH



MS2122 StratosE



MS202x Stratos





From its brilliant blue indicator to its smooth charcoal body and black accents, Stratos exudes quality and beauty. Its tasteful

above-counter design speaks of its high-performance upbringing. In fact, everything about Stratos is purposeful; designed to take high-volume POS scanning to new heights.

Speed. Because you don't want your customers waiting in line. Time is money. And nowhere is that more apparent than at the checkout. With Stratos**SCAN**™ 6-sided, 360° scanning, advanced Stratos**SPHERE**™ decoding software, 6000 scans per second, and a class-leading 68 scan lines, Stratos' performance is sure to get customers through fast. And thanks to Stratos**SCAN**, operators also benefit from minimized fatigue and stress associated with twisting and turning products.

Uptime. Because you don't want your scanner waiting for a repair technician. You only have a certain number of lanes per store. Each needs to be ready for action when it's convenient for your customers. That's why Stratos is constructed like a tank and tested to withstand the rigors

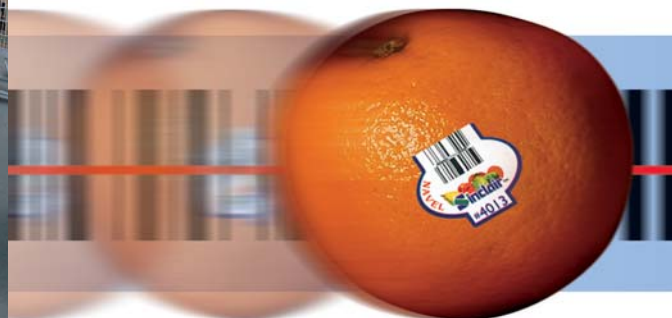
of today's checkout environment. But we've faced reality, scanners sometimes malfunction, so Metrologic invented Stratos**SWAP**™ modular optics engine technology – small, pre-aligned, field-replaceable modules that pop into place in a matter of minutes. Simple. No need for full-unit spares taking up warehouse space. No need for degreed engineers on-call. What's more, Stratos' vertical and horizontal scanning zones operate totally independently one from another – a feature we call Stratos**SYNC**™. If one goes down, the other keeps scanning to keep your customers moving.

Return on investment. Because we don't want you waiting to realize increased profit. It starts with value pricing. Then we add features like Stratos**SCHOOL**™ operator training software and a solid “bumper to bumper” warranty and, because every dollar counts, our light 16lb. (non-scale) unit even costs less to ship.

From the
Counter Down
(a scant 4 inches might we add)
Stratos is
Designed for
Speed, Uptime
and Return
on Investment.

So why are you waiting? There's no better time to consider replacing your old flatbed scanners, upgrading your existing 4- and 5-sided dual-plane scanners or upgrading to a scanner/scale. Call us or click on the new products banner at www.metrologic.com.

Stratos**SCAN**™ Stratos**SWAP**™ Stratos**SCHOOL**™ Stratos**SCOPE**™ Stratos**SPHERE**™



Stratos Product Selection Guide

Description			Sides Scanned	Length	Width	Tower Width	Tower Height
Stratos							
MS2020	Scanner/Scale	Full Length	6	508mm (20.0")	292mm (11.5")	324mm (12.8")	178mm (7.0")
MS2021	Scanner	Full Length	6	508mm (20.0")	292mm (11.5")	324mm (12.8")	178mm (7.0")
MS2022	Scanner	Compact	6	419mm (16.5")	292mm (11.5")	324mm (12.8")	178mm (7.0")
StratosE							
MS2122	Scanner	Sub-compact	6	398mm (15.7")	292mm (11.5")	292mm (11.5")	178mm (7.0")
StratosH							
MS2320	Scanner/Scale	Full Length	6	508mm (20.0")	292mm (11.5")	292mm (11.5")	178mm (7.0")
MS2321	Scanner	Full Length	6	508mm (20.0")	292mm (11.5")	292mm (11.5")	178mm (7.0")
MS2322	Scanner	Compact	6	419mm (16.5")	292mm (11.5")	292mm (11.5")	178mm (7.0")



Stratos is a high performance in-counter bi-optic scanner/scale designed for the most demanding high volume supermarket and point of sale applications.

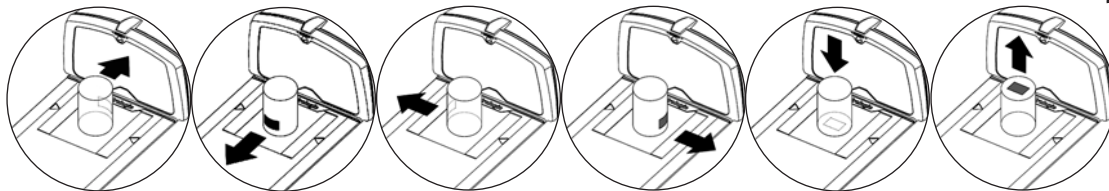


StratosE is a high performance in-counter bi-optic scanner designed for supermarket and POS applications having narrow enclosures around the vertical tower.



StratosH is a high performance in-counter bi-optic scanner/scale designed for supermarket and POS applications having narrow enclosures around the vertical tower.

Bar Codes Can Face All 6-Sides, 360° for Maximum Performance and Speed



Features Set Stratos Apart

Bright Blue and White LEDs
Easy to see scan and good read indicators.

Multi-function Push Buttons
Operator-side volume, sleep and scale zero controls.

Field Replaceable Vertical Window
Quickly remove vertical window for cleaning or replacement.

Debris Guard
Eliminates debris from interfering with scale operation.

Stainless Steel Platter
Easily removed for cleaning, debris removal or replacement.

Scratch Resistant Window
Equipped with Diamonex® or Sapphire horizontal window.

High Impact Window Frame
Designed to withstand demanding POS environments.

Product Weight/Roll Bar
Reduces shrink from overhanging produce.

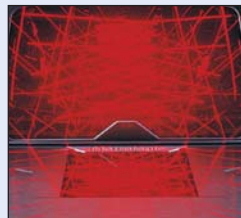
100 mm (4 in.) Below Counter Depth
Thinnest of all high performance, 6-sided bi-optic scanners.

- > **StratosSCAN**
6-sided, 360° scanning minimizes product orientation
- > **StratosSPHERE Decoding Software**
Reads poor quality and damaged bar codes
- > **BackPack™**
Customer interaction peripheral system
- > **Spill Channel**
Channels spills and debris away reducing maintenance
- > **Flash ROM**
Upgrade latest software enhancements on-site
- > **Powered Aux Port**
Connect hand-held scanner for large or bulky items
- > **RSS-14 Decoding**
Decodes RSS-14, RSS Limited and RSS Expanded emerging symbologies
- > **Integrated Scale**
Factory integrated or field upgradeable scale
- > **Loud Speaker**
3 volume/7 tone settings can be heard in all environments
- > **Easy Programming**
Windows® based utility or simple bar code setup
- > **Fully Automatic**
"No touch" infrared wake up from power save modes
- > **EAS Deactivation**
Electronic Article Surveillance (EAS) included

Easy Installation and Maintenance



- > **StratosSWAP**
Field replaceable optical scanning modules can be replaced in minutes.

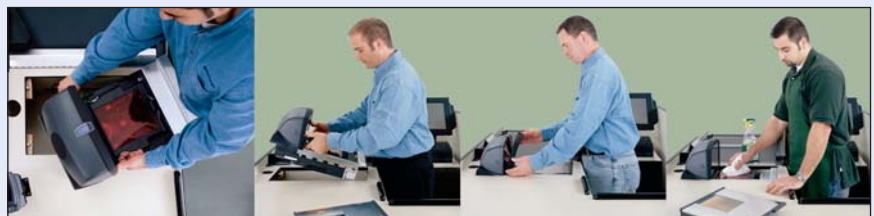


- > **StratosSYNC**
Independent vertical and horizontal scan zones operate independent from one another.



- > **StratosSCOPE**
Visual diagnostic indicator provides immediate, easy-to-read feedback on scanner condition.

- > **Easy to Install, Replace, Maintain and Clean**
Fits existing counter openings. Drop in replacement for existing bi-optic scanners.



install

replace

maintain

clean

Ordering - Five things you should know before placing your order.

1. Determine if you want a scanner only or a combination scanner with scale.
2. If you are ordering a scanner with scale, specify if you need to order remote display.
3. If you are ordering a scanner with scale, specify if you want a single cable or dual cable to transmit data.
4. If you are ordering a scanner with scale, specify if you require the weight in Pounds or Kilograms. Check the dimensions of your counter opening including the amount of space you have for the vertical tower. Stratos is available in 5 different dimensions.
5. RS232 interface is standard. Specify if you need a different interface.

Comparative Dimensions

MODEL	HEIGHT	WIDTH	LENGTH
Stratos MS2020 & MS2021			
Stratos MS2022			
StratosE MS2122			
StratosH MS2320 & MS2321			
StratosH MS2322			

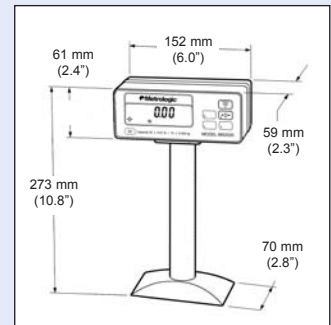
Pole Display (optional)

Easy to Read - Six-digit LCD external display with large 0.5" characters

Accurate and Reliable - Precision load cell and quality electronics ensure repeatable weight measurements and trouble-free operation.

Simple to Use - Reduces operator training time.

Easy to Install - Interfaces to most electronic cash registers and point-of-sale software programs.



OPERATIONAL

Light Source	Visible Laser Diode 650 nm \pm 10 nm	
Laser Power (horizontal / vertical)	1.1 mW / 1.5 mW	
Depth of Scan Field (horizontal)	0 mm - 152 mm (0" - 6.0") for 0.33 mm (13 mil) bar code	
Depth of Scan Field (vertical)	0 mm - 216 mm (0" - 8.5") for 0.33 mm (13 mil) bar code	
Scan Speed	6000 scan lines per second	
Scan Pattern (horizontal / vertical)	68 (40 / 28)	
Motor Speed (horizontal / vertical)	4800 / 6000 RPM	
Sides Read	6	
Scan Zone	360°	
Minimum Bar Width	0.127 mm (5.0 mil)	
Decode Capability	All standard 1-D bar codes, RSS-14, RSS-Expanded, RSS-14 Limited	
System Interfaces	RS-232, Aux. RS-232, IBM468x/469x, USB (low speed and full speed), OCIA	
Print Contrast	35% minimum reflectance differenceN/a	
Number Characters	Up to 80 data characters	
Roll, Pitch, Yaw	360°, 60°, 60°	
Speaker Operation	7 tones or no beep; 3 volume settings	
Indicators (LED)	Blue = laser on, ready to scan; White = good read, decoding	
Length	MS2020 (full size scanner with scale)	508 mm (20.0")
	MS2021 (full size scanner only)	508 mm (20.0")
	MS2022 (compact size scanner only)	420 mm (16.5")
Width	324 mm (12.8")	
Depth (below counter)	100 mm (4.0")	
Height (above counter)	178 mm (7.0")	
Weight	MS2020 (full size scanner with scale)	11.8 kg (26 lbs)
	MS2021 (full size scanner only)	7.7 kg (17 lbs)
	MS2022 (compact size scanner only)	7.3 kg (16 lbs)
Capacity	15.0 kg (30.0 lb)	
Minimum Increment	0.005 kg (0.01 lb)	
Maximum Static Weight	68 kg (150 lb)	
Adjustments Required	Calibration only	
Input Voltage	5.2 V @ 1.5 Amps / 12.0 V @ 1.5 Amps	
Power	13.5 W (scanning); 5 W (standby)	
Operating Current	900 mA (5 V) / 700 mA (12 V)	
DC Transformers	Class II; 5 VDC @ 1.5 A; 12 VDC @ 1.5 A	
Laser Class	CDRH & IEC: Class 1 according to IEC 60825-1:1993 + A1:1997 + A2:2001	
EMC	FCC, ICES-003 & EN55022 Class A	
Operating Temperature	0°C to 40°C (32°F to 104°F)	
IP Rating	IP 55	
Light Levels	4842 Lux (450 footcandles)	
Storage Temperature	-40°C to 60°C (-40°F to 140°F)	
Humidity	5% to 95% relative humidity, non-condensing	
Contaminants	Sealed to resist airborne particulate contaminants	
Ventilation	None required	

Visible Laser Diode 650 nm \pm 10 nm

1.1 mW / 1.5 mW

0 mm - 152 mm (0" - 6.0") for 0.33 mm (13 mil) bar code

0 mm - 216 mm (0" - 8.5") for 0.33 mm (13 mil) bar code

6000 scan lines per second

68 (40 / 28)

4800 / 6000 RPM

6

360°

0.127 mm (5.0 mil)

All standard 1-D bar codes, RSS-14, RSS-Expanded, RSS-14 Limited

RS-232, Aux. RS-232, IBM468x/469x, USB (low speed and full speed), OCIA

35% minimum reflectance differenceN/a

Up to 80 data characters

360°, 60°, 60°

7 tones or no beep; 3 volume settings

Blue = laser on, ready to scan; White = good read, decoding

Visible Laser Diode 650 nm \pm 10 nm

1.1 mW / 1.5 mW

0 mm - 152 mm (0" - 6.0") for 0.33 mm (13 mil) bar code

0 mm - 216 mm (0" - 8.5") for 0.33 mm (13 mil) bar code

6000 scan lines per second

68 (40 / 28)

4800 / 6000 RPM

6

360°

0.127 mm (5.0 mil)

All standard 1-D bar codes, RSS-14, RSS-Expanded, RSS-14 Limited

RS-232, Aux. RS-232, IBM468x/469x, USB (low speed and full speed), OCIA

35% minimum reflectance differenceN/a

Up to 80 data characters

360°, 60°, 60°

7 tones or no beep; 3 volume settings

Blue = laser on, ready to scan; White = good read, decoding

398 mm (15.7")

MS2320 (full size scanner with scale) 508 mm (20.0")

MS2321 (full size scanner only) 508 mm (20.0")

MS2322 (compact size scanner only) 420 mm (16.5")

292 mm (11.5")

292 mm (11.5")

100 mm (4.0")

100 mm (4.0")

178 mm (7.0")

178 mm (7.0")

11.8 kg (26 lbs)

MS2320 (full size scanner with scale) 11.8 kg (26 lbs)

MS2321 (full size scanner only) 7.7 kg (17 lbs)

MS2322 (compact size scanner only) 7.3 kg (16 lbs)

na

15.0 kg (30.0 lb)

na

0.005 kg (0.01 lb)

na

68 kg (150 lb)

na

Calibration only

5.2 V @ 1.5 Amps / 12.0 V @ 1.5 Amps

5.2 V @ 1.5 Amps / 12.0 V @ 1.5 Amps

13.5 W (scanning); 5 W (standby)

13.5 W (scanning); 5 W (standby)

900 mA (5 V) / 700 mA (12 V)

900 mA (5 V) / 700 mA (12 V)

Class II; 5 VDC @ 1.5 A; 12 VDC @ 1.5 A

Class II; 5 VDC @ 1.5 A; 12 VDC @ 1.5 A

CDRH & IEC: Class 1 according to IEC 60825-1:1993+A1:1997+A2:2001

CDRH & IEC: Class 1 according to IEC 60825-1:1993+A1:1997+A2:2001

FCC, ICES-003 & EN55022 Class A

FCC, ICES-003 & EN55022 Class A

0°C to 40°C (32°F to 104°F)

0°C to 40°C (32°F to 104°F)

IP 55

IP 55

4842 Lux (450 footcandles)

4842 Lux (450 footcandles)

-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

Sealed to resist airborne particulate contaminants

Sealed to resist airborne particulate contaminants

None required

None required

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.**

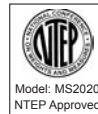
View Metrologic data sheets, user/programming guides, trade show schedules, and much more at:

www.metrologic.com

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Sunrise 2005 Compliant



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