

INDUSTRIAL SCANNERS AND SYSTEMS

Fixed Laser and Imaging Bar Code Scanners

Metrologic Instruments, Inc. is a global supplier of choice for data capture and collection hardware, optical solutions, and image processing software. Metrologic has been delivering innovative, quality products that are cost effective, reliable and supported by the highest level of personal service for nearly 40 years. Metrologic products are sold worldwide through Metrologic's sales, service and distribution offices located in The Americas, EMEA and Asia/Pacific. Metrologic provides its customers not only with a great deal, but a great deal more. For more information visit www.metrologic.com.

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INDUSTRIAL SERIES

Industrial fixed laser and imaging bar code scanners

IQ® Series



IS8000 Series HoloTrak



TECH Series



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IS8000 Series HoloTrak® Mid to long range, mid to high speed, 1D scanning	3
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Product	iQ® Series	IS8000 Series HoloTrak®	TECH Series
Technology	Linear CCD Camera	Holographic Laser	Conventional Optics
Bar Code Type	1D and 2D	1D	1D
Bar Code Width (min)	1D: 0.20 mm (8 mil) 2D: 0.38 mm (15 mil)	0.25 mm (10 mil)	0.19 mm (7.5 mil)
Conveyor Speed (max)*	3.2 m/sec (600 fpm)	1.8 m/sec (350 fpm)	0.8 m/sec (150 fpm)
Sortation*	Yes	Yes	Yes
Presentation	No	Yes	Yes

*Parcel Spacing and Bar Code Dependent



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iQ® Series Image Acquisition Systems and Scanners



Metrologic's iQ® Series sets new standards for high-speed, high-resolution linear CCD camera technology. The iQ Series integrates everything from the unique patented built-in laser illumination system to the CCD camera to the processing electronics in compact, rugged housings. That means fast and easy setup, reliable operation, and the power to aggressively read your bar codes - even under plastic. The iQ Series decodes high-density and poorly printed or damaged codes on objects traveling up to 600 feet per minute. Combining all this with a family of fixed and variable focus configurations gives the series enough flexibility to handle virtually any application.

Of special note is the unique co-planar laser illumination characteristic of the iQ Series. It has many advantageous features including marking a clear decode line for easy alignment, running cool to the touch, essentially eliminating glare, and concentrating the light in a way that gives the iQ Series an impressive depth of field. Images provided by iQ System cameras are crisp and clear.

Commercial, manufacturing, transportation and logistics, and postal and parcel delivery industries all expect outstanding scanning rates, reliability, and accuracy; that is what Metrologic and the iQ Series delivers in a cost-effective, feature rich camera based solution.



*Parcel Spacing and Bar Code Dependent

Sunrise 2005 Compliant

Product	iQ® Series
Technology	Linear CCD Camera
Bar Code Type	1D and 2D
Bar Code Width (min)	1D: 0.20 mm (8 mil) 2D: 0.38 mm (15 mil)
Conveyor Speed (max)*	3.2 m/sec (600 fpm)
Sortation*	Yes
Presentation	No

PRODUCT	iQ®160	iQ®185
DEPTH OF FIELD		
BAR CODE(S)		
OPTICS	Configurable Fixed Focus	Dynamic Focus

features

- High-res linear CCD camera
- Large field of view
- Intelligent decoding
- Integrated illumination
- Remote diagnostics

benefits

- Reads and tracks both 1D and 2D bar codes at very high speeds with very small spacing
- Replaces multiple laser scanner and complex imaging systems
- Increases read rates of damaged and small 1D and 2D bar codes
- Reduces service costs, complexity, size and installation time
- Simplifies system monitoring, troubleshooting and software upgrades

IS8000 Series Holotrak®

Metrologic's IS8000 Series HoloTrak® utilizes the power of holography. These fixed position scanners project a large, dense scan pattern virtually unattainable by traditional scanners. The IS8000 Series HoloTrak's offer models for reading low and high-density codes, at low or high speeds, projecting thousands of scan lines per second in multiple depths of field - all accomplished by Metrologic's exclusive device, the HoloDisc. The IS8000 Series HoloTrak scanners include four models: IS8300, IS8400, IS8500 and IS8550.

All of these models include Metrologic's exclusive holographic architecture. The models differ in the areas of scan pattern, aspect ratio of the bar code, depth of field, and number of scan lines created per second. This industrial product group is designed to increase productivity by providing a hands-free solution to scanning. Applications such as order fulfillment, returns processing, shipping and receiving, and work in process are only a few areas where the IS8000 Series' proven performance is unprecedented.

IS8000 Series scanners are also an ideal solution for scanning parcels on a conveyor system where the conveyor speed reaches a maximum of 1.8 meters per second (350 feet per minute).



TECH Series

Metrologic's TECH Series scanners are designed for short-range scanning. These rugged laser scanners begin scanning just a few inches from the face of the scanner and project a depth of scan field that reaches up to 560 mm (22") from the face. Capable of being mounted in any position, these scanners are a popular choice for warehouse, distribution centers and manufacturing plants. These scanners are the only Metrologic industrial category using conventional scanning optics because holography which excels at a longer-range is not necessary for close up bar code reading. Available in three models, each project a specific "close-range" depth of field. Two of the three models are available as a "raster" version or an omnidirectional scan pattern version. All models are water and shock-resistant and come with user's guide, communication cable/power supply and mounting stand. The TECH scanners are a low cost solution to scanning needs for many applications.



*Parcel Spacing and Bar Code Dependent

Sunrise 2005 Compliant

Product	IS8000 Series HoloTrak®
Technology	Holographic Laser
Bar Code Type	1D
Bar Code Width (min)	0.25 mm (10 mil)
Conveyor Speed (max)*	1.8 m/sec (350 ft/min)
Sortation*	Yes
Presentation	Yes

PRODUCT	IS8550 - HoloTrak®	IS8500 - HoloTrak®	IS8400 - HoloTrak®	IS8300 - HoloTrak®
DEPTH OF FIELD	0 mm (0") 127 mm (5") 254 mm (10") 381 mm (15") 508 mm (20") 635 mm (25") 762 mm (30") 889 mm (35") 1016 mm (40") 1143 mm (45") 1270 mm (50") 1397 mm (55") 1524 mm (60") 1651 mm (65") 1778 mm (70") 1905 mm (75") 2032 mm (80")	0.25 mm (10 mil) SCAN AREA	0.33 mm (13 mil) SCAN AREA	0.51 mm (20 mil) SCAN AREA
BAR CODE(S)	1D	1D	1D	1D
SCAN PATTERN				

features

- Holographic scanning technology
- Holographic omnidirectional scanning
- HoloDisc - reliable optical design
- HoloTunnel - multi-sided scanning
- Holo-Presentation mode

benefits

- Generates large and aggressive scanning field
- Scans skewed bar codes in any orientation
- Spinning disc optics greatly extends life of the scanner
- Linked units easily read codes on multiple sides of objects
- Automate operator processes with hands-free scanning

Sunrise 2005 Compliant

Product	TECH Series
Technology	Conventional Optics
Bar Code Type	1D
Bar Code Width (min)	0.19 mm (7.5 mil)
Conveyor Speed (max)*	0.8 m/sec (150 ft/min)
Sortation*	Yes
Presentation	Yes

PRODUCT	TECH 10®	TECH 8®	TECH 7®	
DEPTH OF FIELD	0 mm (0") 127 mm (5") 254 mm (10") 381 mm (15") 508 mm (20") 635 mm (25") 762 mm (30") 889 mm (35") 1016 mm (40") 1143 mm (45") 1270 mm (50") 1397 mm (55") 1524 mm (60") 1651 mm (65") 1778 mm (70") 1905 mm (75") 2032 mm (80")	0.19 mm (7.5 mil) SCAN AREA	0.19 mm (7.5 mil) SCAN AREA	0.19 mm (7.5 mil) SCAN AREA
BAR CODE(S)	1D	1D	1D	
SCAN PATTERN				

features

- Short optical throw
- Omnidirectional and raster patterns
- Rugged industrial housing
- High-value industrial scanner
- Over 1-billion hours of fleet run-time

benefits

- Close-range scanning in tight locations easily achieved
- Scans bar codes in any orientation
- Withstands over 10 years of industrial abuse by design
- Industry leading performance and reliability at a low cost
- Proven track record assures maximum uptime and life-span

PRODUCT	IS8550 - HoloTrak	IS8500 - HoloTrak	IS8400 - HoloTrak	IS8300 - HoloTrak
DEPTH OF FIELD				
BAR CODE(S)				
SCAN PATTERN				
OPERATIONAL				
Light Source	5 VLDs - 658 nm ± 5 nm	5 VLDs - 658 nm ± 5 nm	3 VLDs - 658 nm ± 5 nm	5 VLDs - 658 nm ± 5 nm
Laser Power	7.8 mW (peak)	7.8 mW (peak)	7.8 mW (peak)	7.8 mW (peak)
Scan Area maximum performance area (shown as blue above)			
Depth of Scan Field	660 mm - 1260 mm (29" - 38")	914 mm - 1266 mm (36" - 64")	788 mm - 1600 mm (31" - 63")	508 mm - 965 mm (20" - 38")
Width of Scan Field	310 mm (12.0")	559 mm (22")	457 mm (18")	305 mm (12")
@ Bar Width	0.25 mm (10 mil)	0.33 mm (13 mil)	0.33 mm (13 mil)	0.25 mm (10 mil)
Conveyor Speed (max - bar code dependent)	1.8 m/sec (350 ft/min)	1.8 m/sec (350 ft/min)	1.8 m/sec (350 ft/min)	1.8 m/sec (350 ft/min)
Scan Speed (max)	8,400 lines per second	5,600 lines per second	3,660 lines per second	5,250 lines per second
Focal Planes	2	4	4	5
Scan Lines / Focal Plane	60	20	12	15
Total Scan Lines	120	80	48	75
Decode Capability	Autodiscriminates all standard 1D bar codes	Autodiscriminates all standard 1D bar codes	Autodiscriminates all standard 1D bar codes	Autodiscriminates all standard 1D bar codes
System Interface	PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB	PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB	PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB	PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB
Bar Code Aspect Ratio	4:1	4:1	4:1	4:1
Length	350 mm (13.8")	350 mm (13.8")	350 mm (13.8")	254 mm (10")
Width	338 mm (13.3")	338 mm (13.3")	338 mm (13.3")	282 mm (11.1")
Height	178 mm (7")	178 mm (7")	178 mm (7")	140 mm (5.5")
Weight	11 kg (25 lbs)	11 kg (25 lbs)	11 kg (25 lbs)	9 kg (20 lbs)
Input Voltage	12 VDC	12 VDC	12 VDC	12 VDC
Power	69 watts	69 watts	53 watts	53 watts
Operating Current	5.75 A	5.75 A	4.42 A	4.42 A
Laser Class (CDRH; IEC)	Class II; Class 2	Class II; Class 2	Class II; Class 2	Class II; Class 2
EMC	FCC Class A; CISPR Class A	FCC Class A; CISPR Class A	FCC Class A; CISPR Class A	FCC Class A; CISPR Class A
Operating Temperature	0°C to 40°C (32°F to 103°F)	0°C to 40°C (32°F to 103°F)	0°C to 40°C (32°F to 103°F)	0°C to 40°C (32°F to 103°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
Relative Humidity	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Light Levels (maximum)	297 Lux (3200 footcandles)	297 Lux (3200 footcandles)	297 Lux (3200 footcandles)	297 Lux (3200 footcandles)

TECH 10	TECH 8	TECH 7	iQ®160	iQ®185
			Configurable Fixed Focus	Dynamic Focus
OPERATIONAL				
1 VLD - 650 nm ± 10 nm	1 VLD - 650 nm ± 10 nm	1 VLD - 650 nm ± 10 nm	Coplanar, multi-laser illumination	Coplanar, multi-laser illumination
0.85 mW (peak)	0.55 mW (peak)	0.68 mW (peak)	23 mW per VLD	23 mW per VLD
..... maximum performance area (shown as blue above)				
254 mm - 559 mm (10" - 22")	203 mm - 457 mm (8" - 18")	76 mm - 254 mm (3" - 10")	800 mm - 1105 mm (31.5" - 43.5")	1194 mm - 2108 mm (47" - 83")
280 mm (11")	254 mm (10")	152 mm (6")	457 mm (18")	918 mm (36")
0.19 mm (7.5 mil)	0.19 mm (7.5 mil)	0.19 mm (7.5 mil)	.33 mm (13 mil)	0.22 mm (9 mil)
0.8 m/sec (150 ft/min)	0.8 m/sec (150 ft/min)	0.8 m/sec (150 ft/min)	3.2 m/sec (600 ft/min)	3.2 m/sec (600 ft/min)
1,250 lines per second	1,250 lines per second	2,000 lines per second	Up to 16,000 lines/sec	Up to 16,000 lines/sec
1	1	1	1	1
25	20	20	1	1
25	20	20	1	1
Autodiscriminates all standard 1D bar codes	Autodiscriminates all standard 1D bar codes	Autodiscriminates all standard 1D bar codes	Autodiscriminates all standard 1D and 2D bar codes	Autodiscriminates all standard 1D and 2D bar codes
PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB	PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB	PC Keyboard Wedge, RS232, Stand Alone Keyboard, USB	RS232, Point to Point RS422, Ethernet	RS232, Point to Point RS422, LVDS optional, Ethernet, fiber optional
4:1	4:1	4:1	>5:1	>5:1
312 mm (12.3")	203 mm (8")	198 mm (7.8")	230 mm (9")	394 mm (15.5")
262 mm (10.3")	216 mm (8.5")	185 mm (7.8")	405 mm (16")	527 mm (20.8")
109 mm (4.3")	97 mm (3.8")	79 mm (3.1")	135 mm (5.3")	222 mm (8.8")
5.2 kg (11.5 lbs)	3.5 kg (7.8 lbs)	2.4 kg (5.2 lbs)	9.1 kg (20 lbs)	27 kg (60 lbs)
11-30 VDC	11-30 VDC	11-30 VDC	115 VAC	115 VAC
15 watts	15 watts	13 watts	288 VA	230 VA
0.75 A (at 20 VDC)	0.75 A (at 20 VDC)	0.65 A (at 20 VDC)	2.5A (at 115 VAC)	2A (at 115 VAC)
Class IIa; Class 1	Class IIa; Class 1	Class IIa; Class 1	CDRH & IEC: Class 2M	CDRH & IEC: Class 2M
FCC Class A; CISPR Class A	FCC Class A; CISPR Class A	FCC Class A; CISPR Class A	FCC Class A	FCC Class A, CISPR Class A
0°C to 40°C (32°F to 103°F)	0°C to 40°C (32°F to 103°F)	0°C to 40°C (32°F to 103°F)	4°C to 43°C (40°F to 110°F)	4°C to 40°C (39°F to 104°F)
-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
297 Lux (3200 footcandles)	297 Lux (3200 footcandles)	297 Lux (3200 footcandles)	N/A	N/A