

500,000
FRAMES PER SECOND
CAN'T BE WRONG



The Perfect Balance of Speed, Size, & Memory.

iX Cameras i-SPEED[®] 5 Series (510 & 513)

Over 6,300 fps at HD resolution – 1920x1080 pixels. 500,000 fps max frame rate.

Experience the Invisible.[™]

Contact us for more information or to schedule a demo today.

HADLAND
IMAGING

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1414 Soquel Ave, Suite 200
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iX Cameras

For more information

Call **1-888-43HADLAND** (1-888-434-2352) or email, sales@hadlandimaging.com about
ultra high-speed imaging solutions. iX Cameras on the web: www.ix-cameras.com

i-SPEED[®] 5 SERIES



iX Cameras i-SPEED® 5 Series

Over 6,300 fps at HD resolution – 1920 x 1080 pixels. 500,000 fps max frame rate.

The i-SPEED 5 series (510 & 513) offers the most versatile and varied output and control options available, allowing the ultimate freedom to use the camera in a variety of applications and industries. Whether you're controlling it through the CDUE or a local computer, you'll use an intuitive control system, allowing for quick recording, playback, cropping and saving of clips. Multiple video outputs allow for instant streaming of camera images, third-party connectivity and live interaction. Standard and ruggedized Ethernet connections and dedicated discrete connectors for trigger, sync, and exposure functions provide easy-access connectivity for scientific applications.

The Perfect Balance of Speed, Size & Memory – Ready for Action.

The i-SPEED 5 Series includes new mid-range cameras from iX Cameras. Designed with value in mind, these cameras strike the perfect balance between speed, size, and memory. Equipped with a full HD sensor, there's plenty of power for laboratories, research and test range applications. Up to 144 GB of memory in a compact package for long duration recording and still fit the camera into tight areas and lab spaces. Incorporating a truly innovative internal cooling system, these cameras are environmentally sealed and the first in their class for use in highly demanding environments.

Key Features

i-SPEED 510 High-Speed HD Camera*

HD resolution	4,980 fps @ 1920 x 1080
Standard resolution	10,000 fps @ 1176 x 870
Max frame rate	500,000 fps
Memory	18 GB (std) / 36, 72, 96, 144 GB
Sensor	Color / Mono
ISO	Mono 8,500 D / 68,000 D Color 3,060 D / 24,480 D

i-SPEED 513 High-Speed HD Camera*

HD resolution	6,382 fps @ 1920 x 1080
Standard resolution	10,000 fps @ 1344 x 984
Max frame rate	500,000 fps
Memory	18 GB (std) / 36, 72, 96, 144 GB
Sensor	Color / Mono
ISO	Mono 8,500 D / 68,000 D Color 3,060 D / 24,480 D

PC Software:

Control ONE, Control MULTI-DAQ, i-SPEED Movie Maker, i-SPEED Viewer, i-SPEED Lens Calculator, i-SPEED Viewer, ProAnalyst® Lite by Xcitex, C++, LabView

*Frame rates, resolution & duration data available.

i-SPEED 513 Tech Specs

specs vary between models

IMAGER

Sensor type	Custom CMOS
Sensor resolution	1920 x 1080 pixels
Sensor size	25.92 mm x 14.58 mm
Sensor diagonal	29.74 mm
Pixel size	13.5 µm
Bit depth	12 bit (36 bit color)
ISO	Mono 8,500 D / 68,000 D Color 3,060 D / 24,480 D
Max frame rate	500,000 fps
Shutter type	Global exposure
Shutter time	1 µs min (standard) fast mode 250 ns min (export restricted)

SYNCHRONIZATION & CAPTURE

Trigger	TTL T0 to 0–100%
Trigger modes	Circular, ROC, BROCC
Sync	10 Hz – 350 kHz
Luminance histogram	Iris setting aid tool
i-CHEQ 360	Camera status LEDs
i-FOCUS	Focusing aid tool
i-EXPOSE	High/low exposure highlight
Control	PC or CDUE
IRIG input	IRIG – B to 1 µs
Internal memory	18 GB std, upgrade to 144 GB

CONNECTIVITY

Video outputs	HD-SDI, HDMI
USB	USB 3
Network	1Gb/s RJ45 / 10 pin Lemo
Video	IXV, AVI (comp. or uncompressed)
Image sequence	TIFF, JPG, RAW
Ethernet control	1 Gb/s
Remote control	Via supplied software

PHYSICAL & ENVIRONMENTAL

Dimensions (WHL)	5 x 5.1 x 12" (127 x 129 x 305 mm)
Weight	9.9 lb (4.5 kg)
Input voltage	14–36 V
Power consumption	110 W nominal, 150 W max
Mounting	1/4 x 20 & 3/8 x 16 tripod plate
Lens mount	Custom, swappable lens plate
EMC	EN55032-A, EN55024
Safety	BS EN61010-1 (camera), IEC60950 (PSU)
CE marking	EMC directive (camera), EMC directive, LV directive (PSU)
Lead free	RoHS directive
WEEE	Compliant
Temperature °F	14° to 122° operation, -4° to 140° storage
Temperature °C	-10° to 50° operation, -20° to 60° storage
Pressure	71 kpa to 106 kpa
Relative humidity	95% at 104°F non-condensing
Power input connector	4 pin Lemo
Trigger input	BNC 75 Ω
I/O connector	10 pin Lemo, trigger in / sync / exposure out / remote power

PURCHASING OPTIONS

CDUE	Controller Display Unit
Sensor	Color / Mono
Memory	18 GB (std) / 36 GB / 72 GB / 96 GB / 144GB
Internal SSD	500 GB / 1 TB / 2 TB / 4 TB / 8 TB
External SSD	500 GB / 1 TB / 2 TB
Lens mounts	F mount (Nikkor D & G), C mount / EF mount
Warranty	1 yr (std) / 2 yr / 3 yr
Control	PC or CDUE

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