FASTEC (IMAGING"

HIGH-SPEED IMAGING IN THE PALM OF YOUR HAND



FASTEC IL5

IL5 At A Glance

- IL5-Q records Quad HD (1440p) @ 359fps
- IL5-H records Full HD (1080p) @ 634fps
- IL5-S records 1280 x 1014 @ 1000fps; HD (720p) @ 1400fps
- Advanced 5-Megapixel CMOS sensor
- Multiple recording modes to suit any situation
- Control via powerful FasMotion Software on PC or Mac or via built-in web interface
- Long Record Option: Stream video directly to an SSD

Key Features

- Performance to fit With four models from QSXGA (2560x2048) @ 253fps to SVGA (800x600) @1677fps, there is an *IL5* that is right for your needs. All models use an advanced 5 Megapixel sensor that produces remarkably clean images at all resolutions. Binning and sub-sampling features of the sensor give it great flexibility and sensitivity.
- FasFire Mode Ultra-fast save times to the onboard media while recording high-speed bursts of hundreds or even thousands of images at a time, the IL5 is always ready for the next high-speed snapshot!
- **Flexible Control** The *IL5* can be controlled over Gigabit Ethernet via Fastec Fas*M*otion software on your PC or Mac or via the built-in web interface with your favorite web browser on your PC, Mac, tablet, or even your smartphone.
- Multiple Storage Options The *IL5* features both a USB port and an SD port for quick and easy image downloads to USB flash drives, SD cards, or portable hard drives. The optional built-in SSD (solid state drive) provides up to 1TB of lightning-fast non-volatile internal storage.
- **High-Performance Image Transfer** Fas*M*otion camera control, running on a PC or Mac makes workflow a breeze with image transfer rates of up to 90MB/sec, depending on image size, file type, and computer performance.
- Long Record Option With recording speeds of over 200 frames per second at HD 1080p resolution and 1500 fps at VGA resolution to the built-in SSD, the Fastec *IL5* lets you see what you have been missing with normal-speed video. Unlike traditional high-speed camera systems that only record for a few seconds and require careful triggering, the Fastec *IL5* with LR option can record at high speed for many minutes at high resolutions, to many hours at reduced resolutions.





FasCorder mode – Operate the camera as you would a common camcorder! This intuitive Long Record feature allows you to record and pause as needed to follow the action, stop recording and review what you have, and then append additional footage at will, even after a power cycle. Choose between Record on Command (ROC), which records varying length clips, or Burst Record on Command (BROC), which records fixed-length clips. In Playback, all of the recordings are browsable on the timeline. You may play or scrub through them continuously or jump to the beginning of each, making it easy to find the footage you wish to view.

Fastec IL5 Specifications

Standard Features

Sensor 12-bit 5MP CMOS sensor with 5µm square pixels, color or monochrome

Sensor Modes Standard; binning 2x2, 4x4; sub-sampling 2x2, 4x4; combination 2x bin + 2x sub

Resolution by Model IL5-Q: QSXGA 2560 x 2048; IL5-H: HD 1920x1080; -S: SXGA 1280x1024; -L SVGA 800x600

Light Sensitivity 1600 to 12,800* ISO monochrome, 800 to 6400* ISO color (depending on mode)

Shutter Global electronic shutter from 3µsec to 41.654ms

Image Memory 4GB (std.) or 8GB (optional)

Removable Storage SDHC SD card (32GB maximum), USB flash drive

File Formats Stacks - BMP, DNG, JPEG, TIFF, Tiff(raw); Video - AVI, CAP(raw); Still - JPEG

Lens Mounts C-mount (std.), F-mount or PL-mount (optional)

Communication Ports USB 2.0 device (micro-B), Ethernet (10/100/1000Base-T)

Control Software Fas Motion (PC/Mac application), web interface (browser on all platforms)

Six External I/O Ports Markers, Trigger In/Out, Sync In/Out, Arm In/Out (LVTTL (3.3V) or switch closure)

Marker Data Views Fas Motion playback timeline and o-scope mode, XML file

Video Out HDMI (1080p30, 1080p60, 720p, 480p)

Construction Anodized machined aluminum housing

Power 10-26v @ 22W (max). Universal power supply included

Operating Environment +5°C to +50°C

Size and Weight 184mm W x 112mm H x 40mm D. 1Kg (2.2 lbs.).

Optional Features

WiFi 802.11 b/g/n, security: open, WEP, WPA(2) - PSK

Built-In SSD Storage Solid State Drive (SSD): 256GB, 512GB, 1TB

Long Record Streams uncompressed video to SSD at 480MB/sec; 8GB mem. + SSD required

*Higher ISO settings available via bit-shifting and analog gains result in lower SNR. Binning modes reduce noise.

Sample Record Rates and Times

				Normal Mode*			Long Record Mode**	
				Resolution	Max Frame Rate	Recording Time	Max Frame Rate	Recording Time
				2560 x 2048 (QSXGA)	253 fps	6.3 sec	91	34.9 min
				2560 x 1440 (QHD)	359 fps	6.3 sec	130	34.7 min
				1920 x 1080 (HD: 1080p)	634 fps	6.5 sec	231	34.7 min
Ϋ́				1440 x 1080	634 fps	8.5 sec	308	34.7 min
QSXGA	IL5-H: HD 1080p	SXGA		1280 x 1024 (SXGA)	991 fps	6.4 sec	366	34.7 min
				1280 x 1014	1001 fps	6.4 sec	369	34.7 min
IL5-Q:				1280 x 720 (HD: 720p)	1403 fps	6.5 sec	520	34.7 min
=				1000 x 1000	1015 fps	8.2 sec	478	34.7 min
				1024 x 768 (XGA)	1316 fps	8.1 sec	610	34.7 min
		IL5-S:		800 x 600 (SVGA)	1677 fps	10.4 sec	993	34.7 min
			SVGA	800 x 450	2221 fps	10.5 sec	1331	34.7 min
				768 x 576	2764 fps	6.8 sec	1084	34.7 min
			1L5-L:	640x480 (VGA)	3289 fps	8.3 sec	1562	34.7 min
			_	512 x 384	4061 fps	10.5 sec	2441	34.7 min
				320 x 240	6267 fps	17.4 sec	5000	42.8 min

All Specifications subject to change. All record times and rates assume 8-bit data.

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^{*}Record times assume 8GB of memory. Divide Record times by 2 for approximate 4GB record times.

^{**}LR Record times assume Long Record option and 1TB SSD. Divide by 2 if using a 512GB SSD.