



IL5: Wherever high-speed imaging is needed...



Standard Features

- Compact design that easily fits machine and laboratory setups, including microscopes
- Advanced 2560 x 2080 12-bit CMOS sensor
- 5 μ low-noise pixel for superior depth of field and high system magnification
- Full HD frame rates above 600fps
- Over 20,000fps at reduced resolutions
- Built-in web interface for control via browser on PC, tablet, or phone
- Advanced PC software for Windows, Mac, Linux

Options

- Internal SSD up to 2TB
- Streaming modes for long record times
- 6-headed I/O cable for advanced synchronization and digital input
- WiFi: control camera via tablet, PC, or phone



At home in the manufacturing plant or the research facility, IL5 cameras are found atop microscopes, on tripods, or bolted to production machinery world wide.

Recording Rates and Time

Normal Mode*

	Resolution	Max Frame Rate	Recording Time
IL5-O: QSXGA IL5-H: HD 1080p IL5-S: SXGA IL5-L: SVGA	2560 x 2048 (QSXGA)	253 fps	6.3 sec
	2560 x 1440 (QHD)	359 fps	6.3 sec
	1920 x 1080 (HD: 1080p)	634 fps	6.5 sec
	1440 x 1080	634 fps	8.5 sec
	1280 x 1024 (SXGA)	991 fps	6.4 sec
	1280 x 1014	1001 fps	6.4 sec
	1280 x 720 (HD: 720p)	1403 fps	6.5 sec
	1000 x 1000	1015 fps	8.2 sec
	1024 x 768 (XGA)	1316 fps	8.1 sec
	800 x 600 (SVGA)	1677 fps	10.4 sec
	800 x 450	2221 fps	10.5 sec
	768 x 576	2764 fps	6.8 sec
	640x480 (VGA)	3289 fps	8.3 sec
	512 x 384	4061 fps	10.5 sec
	320 x 240	6267 fps	17.4 sec
	64 x 32	29090 fps	2min 19 sec

Long Record Mode**

	Resolution	Max Frame Rate	Recording Time
IL5-O: QSXGA IL5-H: HD 1080p IL5-S: SXGA IL5-L: SVGA	2560 x 2048 (QSXGA)	91 fps	34.9 min
	2560 x 1440 (QHD)	130 fps	34.7 min
	1920 x 1080 (HD: 1080p)	231 fps	34.7 min
	1440 x 1080	308 fps	34.7 min
	1280 x 1024 (SXGA)	366 fps	34.7 min
	1280 x 1014	369 fps	34.7 min
	1280 x 720 (HD: 720p)	520 fps	34.7 min
	1000 x 1000	478 fps	34.7 min
	1024 x 768 (XGA)	610 fps	34.7 min
	800 x 600 (SVGA)	993 fps	34.7 min
	800 x 450	1331 fps	34.7 min
	768 x 576	1084 fps	34.7 min
	640x480 (VGA)	1562 fps	34.7 min
	512 x 384	2441 fps	34.7 min
	320 x 240	5000 fps	42.8 min

All specifications subject to change. All record rates assume 8-bit data.

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

**LR Record times assume "D" option and 1TB SSD. Divide by 2 for 512GB SSD; multiply by 2 for 2TB SSD.

IL5 Specifications

Standard Features

Sensor	12-bit CMOS sensor with 5µm square pixels, color or monochrome
Sensor Modes	Standard, binning 2x2 or 4x4; sub-sampling 2x2 or 4x4; Or 2x binning + 2x sub-sampling
Resolution by Model	IL5-Q: QSXGA 2560 x 2048; IL5-H: HD 1920x1080; IL5-S: SXGA 1280x1024; IL5-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	SD card (SDHC: 32GB maximum); USB flash drive
File Formats	Stacks – BMP, DNG (color), JPEG (selectable quality), TIFF, TIFF(raw); Video – AVI (selectable quality (compressed) or un-compressed), CAP(raw); Still – JPEG
Lens Mounts	C-mount (all cameras ship with C-mount), F-mount or PL-mount (optional)
Communication Ports	USB 2.0 device port (micro-B), Ethernet (10/100/1000Base-T)
Control Software	FasMotion (PC/Mac application), web interface (web browser on all platforms)
Six External I/O Ports	Trigger In/Out, Sync In/Out, Arm In/Out (LVTTTL (3.3V) or switch closure); Any or all of the I/O ports may be used as Marker inputs
Marker Data Views	Camera display info line, playback timeline, FasMotion o-scope mode, XML file
Video Out	HDMI (1080p30, 1080p60, 720p, 480p)
Construction	Anodized machined aluminum housing
Power	10-26 VDC external
Power Consumption	22W maximum
Operating Environment	+5°C to +50°C
Size and Weight	184mm W x 112mm H x 50mm D. 1 Kg (2.2 lbs.)

Optional Features

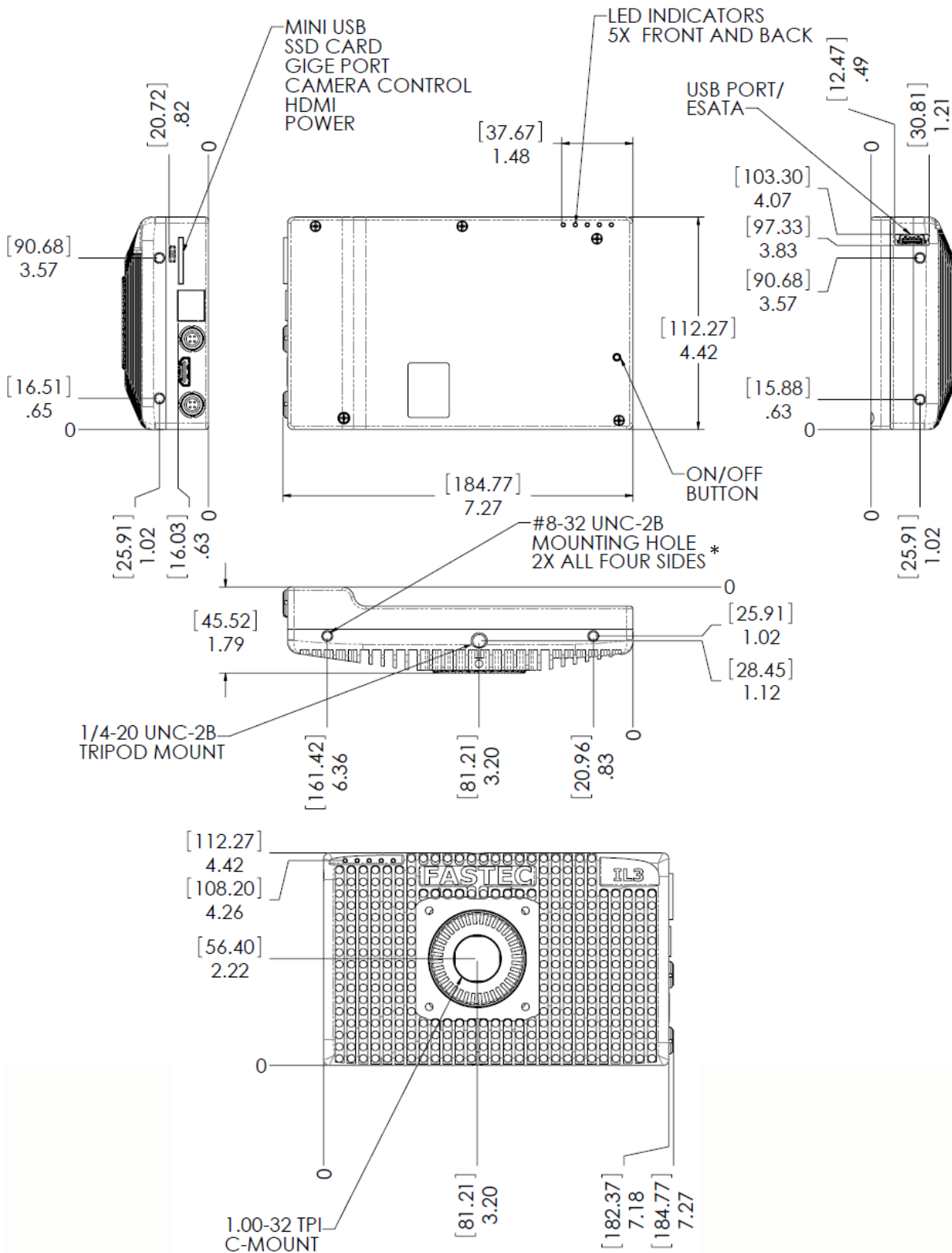
WiFi	802.11 b/g/n, Security: open, WEP, WPA(2) - PSK
Built-In Storage	Solid State Drive (SSD): 256GB, 512GB, 1TB
Long Record	Streams uncompressed video to SSD at 480MB/sec; 8GB mem. + SSD required; ships with an external battery pack

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

All specifications subject to change.

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IL5 Dimensions



All dimensions in inches and []mm.
 Mount 1/4-20 UNC on bottom is for tripod.
 Additional 1/4-20 UNC is located on the top
 of the camera.

*On request 8-32 helicoils may be installed at the
 factory before the camera is shipped