

FASTEC IMAGING™

HIGH-SPEED IMAGING IN THE PALM OF YOUR HAND

FASTEC TS5-H



TS5-H At A Glance

- Handheld, battery-powered, with built-in touchscreen LCD
- TS5-H models record full 1080p @ 634fps
- 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

Key Features

- **Standard Record Mode: Classic High-Speed Imaging** – The *TS5-H* records beautifully sharp 1920 x 1080 vivid color video at 634 frames per second. Smaller resolutions may be recorded at faster frame rates: 720p @ 945fps, 800 x 600 @ 1125fps, etc. Binning and sub-sampling features of the sensor give the *TS5-H* great flexibility and sensitivity.
- **FasFire Mode:** Ultra-fast save times to the onboard media *while simultaneously recording* high-speed bursts of hundreds or even thousands of images at a time, the *TS5-H* is always ready for the next high-speed snapshot!
- **Portability** – With its small form factor, battery operation, large built-in LCD touch screen and intuitive on-screen menu system, the *TS5-H* puts the power of both a traditional high-speed camera *and* long-record system into the palm of your hand. The *TS5-H* is truly a point-and-shoot high-speed camera solution.
- **Flexible Control** – The *TS5-H* can be operated as a self-contained, handheld camera, or controlled over Gigabit Ethernet via Fastec FasMotion 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.
- **High-Performance Image Transfer** – The FasMotion application makes workflow a breeze with transfers of uncompressed images via Gigabit Ethernet at rates of 50–80MB/s to moderately equipped PCs.
- **Multiple Storage Options** – The *TS5-H* 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 built-in SSD provides 256GB or 512GB of lightning-fast non-volatile internal storage.



Fastec TS5-H Specifications

Standard Features

System Design	Handheld, battery-powered, portable with touchscreen LCD
Sensor	12-bit 5MP CMOS sensor with 5µm square pixels, color or mono
Sensor Modes	Standard, binning 2x2, 4x4; Sub-sampling 2x2, 4x4; 2x bin + 2x sub
Maximum Resolution	1920 x 1080 (standard mode); 1280 x 1024 (binning and sub-sampling)
Light Sensitivity	1600 to 12,800* ISO mono, 800 to 6400* ISO color (depending on mode)
Shutter	Global electronic shutter from 3µsec to 41.667ms
Image Memory	4GB (std.) or 8GB (optional)
Removable Storage	SD card (SDHC: 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)
Built-in Monitor	High resolution, 178mm (7") diagonal LCD
Communication Ports	USB 2.0 device (micro-B), Ethernet (10/100/1000Base-T)
Control Software	FasMotion (PC/Mac application), web interface (browser on all platforms)
Six External I/O Ports	Markers, Trigger In/Out, Sync In/Out, Arm In/Out (LVTTTL (3.3V) or switch closure)
Marker Data Views	Camera display info line, playback timeline, FasMotion o-scope mode, XML file
Video Out	HDMI (1080p60, 1080p30, 720p, 480p)
Construction	Anodized machined aluminum housing
Power	Rechargeable Internal Li-ion battery, or 10-26 VDC external
Power Consumption	42W maximum
Operating Environment	+5°C to +40°C
Size and Weight	228mm (9.0") W x 114mm (4.5") H x 89mm (3.5") D. 1.8 Kg (3.9 lbs.)

Optional Features

WiFi	802.11 b/g/n, Security: open, WEP, WPA(2) - PSK
Built-In Storage	Solid State Drive (SSD): 256GB or 512 GB

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

Sample Record Rates and Times

Resolution	Max Frame Rate	Recording Time
1920 x 1080 (1080p)	634fps	6.5 sec
1440 x 1080	634fps	6.4 sec
1280 x 1024 (SXGA)	668fps	7.2 sec
1280 x 960	721fps	7.2 sec
1280 x 720 (720p)	943fps	7.2 sec
1024 x 1024	668fps	9.1 sec
1024 x 768 (XGA)	885fps	9.1 sec
800 x 600 (SVGA)	1125fps	11.8 sec
800 x 450	1477fps	11.9 sec
640 x 576 (PAL)	1172fps	14.7 sec
640x480 (VGA)	1398fps	14.8 sec
512 x 384	1732fps	18.7 sec
320 x 240	2694fps	41.1 sec

All Specifications subject to change. All Record times assume 8-bit data.

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

