

FASTEC IMAGING™

HIGH-SPEED IMAGING IN THE PALM OF YOUR HAND

Fastec TS4

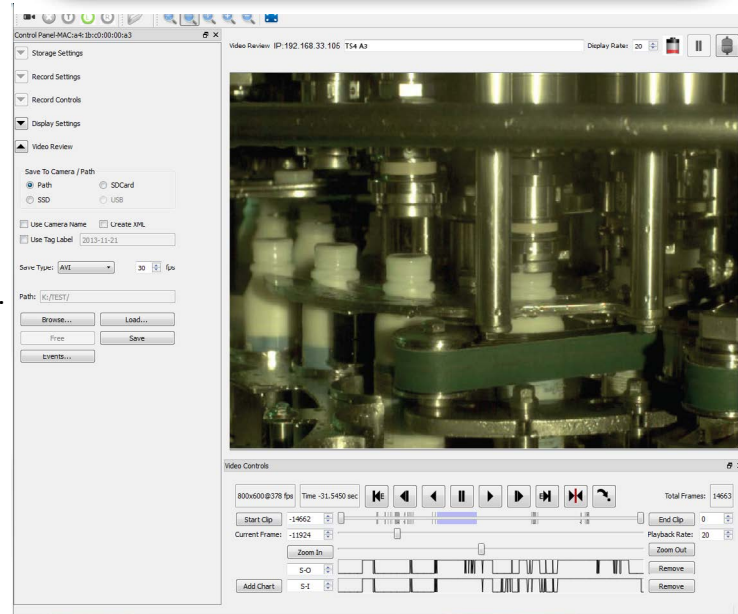


TS4 At A Glance

- Long Record and Burst Mode in one camera!
- 1280 x 1024 CMOS 510 fps sensor
- Hand-held, battery-powered, with built-in LCD
- Full resolution: 365 fps to on-board SSD (SATA III option)
- Camera control via touch screen, built-in web interface or FasMotion application

Key Features

- **Burst Mode: Classic High-Speed Imaging** – The TS4 records ultra-sharp 1280 x 1024 mono or vivid color images at over 500 frames per second to 8GB of image memory.
- **Long Record Mode**– with recording speeds of up to 365 frames per second at full resolution and 1541 fps at VGA resolution (SATA III option) to the built-in SSD, the Fastec TS4 lets you see what you have been missing with standard video. Unlike traditional high-speed camera systems, which only record for a few seconds and require careful triggering, the Fastec TS4 can record continuously at high speed for many minutes, or hours at reduced resolutions.
- **FasFire**– Ultra-fast save times to an SSD or SD card *while recording* high-speed bursts of hundreds or even thousands of images at a time, the TS4 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 TS4 puts the power of both a traditional high-speed camera *and* long-record system into the palm of your hand. The TS4 is truly a point-and-shoot high-speed camera solution.
- **Flexible Control** – The TS4 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 TS4 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 TS4 Specifications

Standard Features

System Design	Handheld, battery-powered, portable with multiple I/O ports and media options
Operating Modes	Burst mode (record to high-speed memory), Long Record mode (record to SSD)
Sensor	10-bit CMOS sensor with 14 μm square pixels, color or monochrome
Resolution	1280 x 1024 pixels maximum
Light Sensitivity	3,200 ISO monochrome, 1,600 ISO color
Record Rate	24 to 510 fps at 1280 x 1024, over 60,000 fps at reduced resolutions
Shutter	Global electronic shutter from 2 μsec to 41.667ms
Image Memory	8GB
Built-In Storage	Solid State Drive (SSD): 256GB SATA II
Removable Storage	SD card (SDHC: 32GB maximum), USB Flash drive
Session Length	256MB to 8GB in Burst Mode, or up to full SSD size in Long Record Mode
File Formats	Stacks – BMP, DNG, JPEG, TIFF (processed or raw); Video – AVI, CAP (raw)
Still Image Format	JPEG
Lens Mount	C-Mount (standard), 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 (1080P, 720P, 480P)
Construction	Anodized machined aluminum housing
Power	Rechargeable Li-ion battery (4+ hours operating), or 10-26 VDC external power
Power Consumption	40W 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
Lens Mounts	F-Mount, PL-Mount
TimeStamps and Sync	IRIG-B (modulated and unmodulated)
Built-In Storage	Solid State Drive: 512GB SATA II, 256GB or 512GB SATA III

Sample Record Rates and Times

Burst Mode 8GB Image Memory	
Resolution	Time@ fps
1280 x 1024	12.8sec @ 510fps
1280 x 1024	26.1sec @ 250fps
1280 x 720	12.8sec @ 725fps
800 x 600	14.2sec @ 1250fps
640 x 480	14.2sec @ 1950fps
512 x 512	16.3sec @ 2000fps
416 x 312	16.1sec @ 4000fps
364 x 274	17.0sec @ 5000fps
230 x 170	21.4sec @ 10000fps

Resolution	SATA II / III	Long Record Mode	
		256GB SSD Time@ FPS	512GB SSD Time@ FPS
1280 x 1024	III (max rate)	7.5min @ 365fps	15min @ 365fps
1280 x 1024	II (max rate)	15min @ 182fps	30min @ 182fps
1280 x 720	III (max rate)	7.5min @ 518fps	15min @ 518fps
1280 x 720	II (max rate)	15min @ 259fps	30min @ 259fps
640 x 480	III (max rate)	7.5min @ 1541fps	15min @ 1541fps
640 x 480	II (max rate)	15min @ 770fps	30min @ 770fps
480 x 480	III (max rate)	7.5min @ 2055fps	15min @ 2055fps
480 x 480	II (max rate)	15 min @ 1027fps	30 min @ 1027fps
480 x 480		1 hour @ 250fps	2 hour @ 250fps

All Specifications subject to change.

Record times and frames calculated for 8-bit pixel depth.