

FASTEC IMAGING™

HIGH-SPEED IMAGING IN THE PALM OF YOUR HAND

TS3-100S



TS3-100S At A Glance

- Handheld, battery-powered, built-in LCD
- 1280 x 1024 at 500 fps CMOS sensor
- Up to 256GB of onboard image storage
- Multiple removable image storage options
- Camera control via touch screen, built-in web interface or PC application

Key Features

- **Portability** – With its small form factor, battery operation, large built-in LCD touch screen and intuitive on-screen menu system, the TS3-100S puts the power of a traditional high-speed camera in the palm of your hands. The TS3 is truly a point-and-shoot high-speed camera.
- **High-Resolution, High-Speed Images** – The TS3-100S records ultra-sharp 1280 x 1024 mono or vivid color images at over 500 frames per second. With recording rates in excess of 98,000 frames per second at reduced resolutions, almost no event is too fast for the TS3.
- **Flexible Control** – The TS3-100S can be operated as a self-contained, handheld camera, or controlled over Gigabit Ethernet via Fastec FasMotion software on your PC 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 TS3-100S 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. An optional built-in SSD (solid state drive) provides for up to 256GB of lightning-fast non-volatile internal storage. Shoot all day long without having to download to a computer.
- **High-Performance Image Transfer** – With download rates of about 8GB per minute to the optional internal SSD, or just seconds for short clips, you will always be ready to take the next shot with the TS3-100S! 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.

Fastec TS3-100S

Camera Specifications

Standard Features

System Design	Handheld, battery-powered, portable with multiple PC I/O ports
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 500 fps at 1280 x 1024, up to 98,000 fps at reduced resolutions
Shutter	Global electronic shutter from 2 μsec to 41.667ms
Image Memory	4GB. Optional upgrade to 8GB
Removable Storage	SD card (SDHC: 32GB maximum), USB Flash drive
Session Length	256MB up to full image memory
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
PC Communication Ports	USB 2.0 device (micro-B), Ethernet (10/100/1000Base-T)
Control Software	FasMotion (PC application), web interface (browser on all platforms)
External I/O Sync	Trigger In/Out, Sync In/Out, Arm In/Out (LVTTTL (3.3V) or switch closure)
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
Image Memory	Upgrade to 8GB total
Built-In Storage	Solid State Drive (SSD) 64GB, 128GB or 256GB
Lens Mounts	F-Mount, PL-Mount
TimeStamps and Sync	IRIG-B (modulated and unmodulated)

Sample Frame Rates and Resolutions

Frame Rate Rate: fps	Resolution		4GB Capacity		8 GB Capacity	
	H.	V.	Time: sec.	Frames	Time: sec.	Frames
125	1280	1024	26.0	3240	52.2	6517
250	1280	1024	13.0	3240	26.1	6517
500	1280	1024	6.5	3240	13.0	6517
700	1280	720	6.4	4608	13.3	9269
1250	800	600	7.1	8848	14.2	17796
1900	640	480	7.3	13825	14.6	27805
2000	512	512	8.1	16202	16.3	32584
4000	416	312	8.2	32719	16.4	65802
5000	356	268	8.9	44499	17.9	89494
10000	228	166	11.2	112114	22.5	225473
15000	192	120	12.3	184109	24.5	370264
20000	160	100	13.2	264956	26.6	532855

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