

# FASTEC IMAGING™

HIGH-SPEED IMAGING IN THE PALM OF YOUR HAND

## TS3-100L



### TS3-100L At A Glance

- Handheld, battery-powered, built-in LCD
- 800 x 600 at 1250 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 TS3-100L 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-Speed Images** – The TS3-100L records 800 x 600 mono or color images at 1250 frames per second, opening a world of events too fast for the human eye to see.
- **Flexible Control** – The TS3-100L 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 TS3-100L 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 TS3-100L! 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 TS3-100L

## Camera Specifications

### Standard Features

<b>System Design</b>	Handheld, battery-powered, portable with multiple PC I/O ports
<b>Sensor</b>	10-bit CMOS sensor with 14 $\mu\text{m}$ square pixels, color or monochrome
<b>Resolution</b>	800 x 600 pixels maximum
<b>Light Sensitivity</b>	3,200 ISO monochrome, 1,600 ISO color
<b>Record Rate</b>	24 to 1250 fps at 800 x 600
<b>Shutter</b>	Global electronic shutter from 2 $\mu\text{sec}$ to 41.667ms
<b>Image Memory</b>	4GB. Optional upgrade to 8GB
<b>Removable Storage</b>	SD card (SDHC: 32GB maximum), USB Flash drive
<b>Session Length</b>	256MB up to full image memory
<b>File Formats</b>	Stacks – BMP, DNG, JPEG, TIFF (processed or raw); Video – AVI, CAP (raw)
<b>Still Image Format</b>	JPEG
<b>Lens Mount</b>	C-Mount (standard), F-Mount or PL-Mount (optional)
<b>Built-in Monitor</b>	High resolution, 178mm (7") diagonal LCD
<b>PC Communication Ports</b>	USB 2.0 device (Micro-B), Ethernet (10/100/1000Base-T)
<b>Control Software</b>	FasMotion (PC application), web interface (browser on all platforms)
<b>External I/O Sync</b>	Trigger In/Out, Sync In/Out, Arm In/Out (LVTTTL (3.3V) or switch closure)
<b>Video Out</b>	HDMI (1080P, 720P, 480P)
<b>Construction</b>	Anodized machined aluminum housing
<b>Power</b>	Rechargeable Li-ion battery (4+ hours operating), or 10-26 VDC external power
<b>Power Consumption</b>	40W maximum
<b>Operating Environment</b>	+5°C to +40°C
<b>Size and Weight</b>	228mm (9.0") W x 114mm (4.5") H x 89mm (3.5") D. 1.8 Kg (3.9 lbs)

### Optional Features

<b>WiFi</b>	802.11 b/g/n, Security: open, WEP, WPA(2) - PSK
<b>Image Memory</b>	Upgrade to 8GB total
<b>Built-In Storage</b>	Solid State Drive (SSD) 64GB, 128GB or 256GB
<b>Lens Mounts</b>	F-Mount, PL-Mount
<b>TimeStamps and Sync</b>	IRIG-B (modulated and unmodulated)

### Sample Frame Rates and Resolutions

Frame Rate	Resolution		4GB Capacity		8 GB Capacity	
	Rate: fps	H.	V.	Time: sec.	Frames	Time: sec.
125	800	600	70.8	8,848	142.4	17,796
250	800	600	35.4	8,848	71.2	17,796
500	800	600	17.7	8,848	35.6	17,796
1000	800	600	8.8	8,848	17.8	17,796
1250	800	600	7.1	8,848	14.2	17,796
125	640	480	110.6	13,825	222.6	27,825
250	640	480	55.3	13,825	111.3	27,825
500	640	480	27.7	13,825	55.7	27,825
1000	640	480	13.8	13,825	27.8	27,825
1250	640	480	11.1	13,825	22.3	27,825

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