FASTEC HS7

FASTER THAN **VISION**

The *FASTEC HS7*

Full high-definition (1920 x 1080) @ 2500fps, the HS7 captures detailed scenes for breathtaking slow-motion playback.

Use lower resolutions for technical work at much higher frame rates.



High-Speed Video Capture!
High-Speed Image Storage!
High-Speed Image Transport!
High-Speed Application Workflow!



- Advanced architecture for enhanced workflow
- Camera with optical interface affords high-bandwidth transport using industry-standard fiber cabling
- Extensible Linux Camera Controller, compatible with standard displays and input devices, including Bluetooth and WiFi
- Run your own applications on the camera controller
- Attach high-speed high-capacity mass storage via USB3.2 or Thunderbolt 4 interfaces

HS7 Specifications

Sensor	10-bit 1920 x 1080 CMOS with 10µm pixels
Minimum Exposure	1 microsecond
Light Sensitivity	ISO 4800 (mono)
Interconnect	12 Channel Type B Fiber Optic patch cable with MPO connectors
Calibration Shutter	Optional Built-in mechanical shutter for black-level calibration in remote mounting installations
Image Memory	8GB, 16GB, or 32GB (in camera)
Mass Storage	Up to 2TB NVMe SSD (in camera)*
File Formats	Stacks – BMP, DNG (color), JPEG, TIFF (processed or raw) Video – AVI, CAP (raw), MP4
Lens Mount	Micro Four Thirds (MFT) Standard; C, F, EF, PL, and more via adapters
Lens Control	Software control: Focus, Aperture, Zoom (on MFT only)
Control Software	FasMotion native on Controller, with network support: FasMotion (Windows/MacOS/Linux application) on networked PC
Marker & Metadata	Image window playback time line, Fas*M*otion o-scope mode, XML file
External I/O Ports	3 configurable ports: Trigger In/Out, Sync In/Out, Arm In/Out, or General Purpose In @ 3.3v LVTTL, or 5v TTL, or switch closure
Construction	Anodized machined aluminum housing
Power	Camera: 12v 30w; Controller 19v 90w
Environment	+5˚C to +40˚C
Size and Weight	114mm (4.5") W x 114mm (4.5") H x 76mm (3") D. 1 Kg (2.2 lbs.)

Example Record Rates and Times

Resolution	Max Frame Rate 8 or 10 bits (Normal mode)	Record Time 8 bits to 32GB memory	Max Frame Rate 8 bits (Streaming to SSD)	Record Time 8 bits streaming to 1TB SSD*
1920 x 1080 (HD: 1080p)	2500 fps	6.6 sec	723 fps	11.2 min
1280 x 1024 (SXGA)	2634 fps	9.8 sec	1144 fps	11.2 min
1280 x 720 (HD: 720p)	3726fps	9.8 sec	1627 fps	11.2 min
1024 x 768 (XGA)	3497 fps	12.4 sec	1907 fps	11.2 min
800 x 600 (SVGA)	4455 fps	16 sec	3124 fps	11.2 min
800 x 450	5921 fps	16 sec	4184 fps	11.2 min
640 X 480 (VGA)	5537 fps	20.1 sec	4881 fps	11.2 min
512 X 384	6874fps	25.2 sec	5000 fps	17.3 min
512 x 256	10.136 fps	25.8 sec	5000 fps	26 min
412 x 212	12.000 fps	32.6 sec	5000 fps	39 min
220 x 64	35,168 fps**	51.3 sec	5000 fps	2 hours

NOTE: Frame rates increase with a decrease in vertical resolution only. All frame rates shown may be achieved at full horizontal resolution (1920).

**Streaming mode with "D" option only.*

*** Maximum frame rate*

All Specifications subject to change.

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HS Controller Specifications





FASTEC HS Controller

Full-featured mini desktop PC + high-performance fiber interface for HS7.

Fully compatible with HS, TS and IL cameras!

Software	*FasMotion Camera Control, rich graphics, communications, and productivity bundle*
Operating System	*Arch Linux with Cinnamon Desktop*
Processor	*11th Generation Intel i5 @ 2.4GHz base, 4.2 GHz Turbo*
Memory / Storage	*16GB DDR4 / 512GB SATA SSD*
Graphics	*Intel Iris Xe Graphics*
Display	*2x DP1.4a via Thunderbolt 4 (USB Type-C port)*
Camera Interface	*12 channel type B fiber optic patch cable with MPO connectors*
USB	*3x USB3.2 (10G), 2x USB4 (40G) via Thunderbolt 4 (USB Type-C port)*
Ethernet / WiFi	*2.5 Gigabit Ethernet / WiFi 6*
Bluetooth	*Bluetooth 5.1*
Power	*19v 90w*
Dimentions / Weight	*114mm x 114mm x 54mm / 1Kg*