

## FASTER THAN VISION

### The FASTEC HS5

*Proven 12-bit CMOS sensor on a new high-performance platform utilizing the Fastec Camera Controller for unrivaled access to captured images!*

*2560 x 2048 @ 253fps streaming to 1TB SSD  
512 x 306 @ 5000fps  
Up to 29,000fps at smaller resolutions*



**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

# HS5 Specifications

<b>System Design</b>	Camera plus tethered Controller
<b>Sensor</b>	12-bit 2560 x 2048 CMOS, 5µm pixels, supports binning and subsampling
<b>Interconnect</b>	12 Channel Type B Fiber Optic patch cable with MPO connectors
<b>Calibration Shutter</b>	Built-in mechanical shutter for black-level calibration
<b>Image Memory</b>	8GB, 16GB, or 32GB (in camera)
<b>Mass Storage</b>	Up to 2TB NVMe SSD (in camera)*
<b>External Storage</b>	Thunderbolt3 or USB-3.1 SSD, MicroSDXC slot with UHS-1 support
<b>File Formats</b>	Stacks – BMP, DNG (color), JPEG, TIFF (processed or raw) Video – AVI, CAP (raw), MP4
<b>Lens Mount</b>	Micro Four Thirds (MFT) Standard; C, F, EF, PL, and more via adapters
<b>Lens Control</b>	Software control: Focus, Aperture, Zoom
<b>Controller Display</b>	HDMI 2.0a and/or DisplayPort 1.2 via TB3/USB-C port. Supports multiple displays
<b>Control Software</b>	FasMotion native on Controller, with network support: FasMotion (Windows/MacOS/Linux application) on networked PC
<b>Marker &amp; Metadata</b>	Image window playback time line, FasMotion o-scope mode, XML file
<b>External I/O Ports</b>	3 configurable ports: Trigger In/Out, Sync In/Out, Arm In/Out, or General Purpose In @ 3.3v LVTTTL, or 5v TTL, or switch closure
<b>Construction</b>	Anodized machined aluminum housing
<b>Power</b>	Camera: 12v 30w; Controller 19v 90w
<b>Environment</b>	+5°C to +40°C
<b>Size and Weight</b>	114mm (4.5") W x 114mm (4.5") H x 76mm (3") D. 1 Kg (2.2 lbs.)

## Record Rates and Times

Resolution	Max Frame Rate (8, 10, or 12 bits)	Record Time 8 bits to 32GB memory	Record Time 8 bits streaming to 1TB SSD*
2560 x 2048 (QSXGA)	253 fps	25 sec	12.5 min
2560 x 1440 (QHD)	359 fps	25 sec	12.5 min
1920 x 1080 (HD: 1080p)	634 fps	25 sec	12.6 min
1280 x 1024 (SXGA)	991 fps	25 sec	12.8 min
1280 x 720 (HD: 720p)	1403 fps	25 sec	12.8 min
1024 x 768 (XGA)	1316 fps	32 sec	16 min
800 x 600 (SVGA)	1677 fps	41 sec	20.5 min
768 x 576	2764 fps	54 sec	13.6 min
640x480 (VGA)	3289 fps	66 sec	16.4 min
512 x 384	4061 fps	84 sec	25.7 min

\*Streaming mode with "D" option only.

All Specifications subject to change.

# 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!



<b>Software</b>	<i>FasMotion Camera Control, rich graphics, communications, and productivity bundle</i>
<b>Operating System</b>	<i>Arch Linux with Cinnamon Desktop</i>
<b>Processor</b>	<i>11th Generation Intel i5 @ 2.4GHz base, 4.2 GHz Turbo</i>
<b>Memory / Storage</b>	<i>16GB DDR4 / 512GB SATA SSD</i>
<b>Graphics</b>	<i>Intel Iris Xe Graphics</i>
<b>Display</b>	<i>2x HDMI 2.0b , 2x DP1.4a via Thunderbolt 4 (USB Type-C port)</i>
<b>Camera Interface</b>	<i>12 channel type B fiber optic patch cable with MPO connectors</i>
<b>USB</b>	<i>3x USB3.2 (10G), 2x USB4 (40G) via Thunderbolt 4 (USB Type-C port)</i>
<b>Ethernet / WiFi</b>	<i>2.5 Gigabit Ethernet / WiFi6</i>
<b>Bluetooth</b>	<i>Bluetooth 5.1</i>
<b>Power</b>	<i>19v 90w</i>
<b>Dimensions / Weight</b>	<i>114mm x 114mm x 54mm / 1Kg</i>