



FASTEC HS7i

Full high-definition (1920 x 1080) @ 2500fps, the Fastec HS7i captures detailed scenes for breathtaking slow-motion playback. Achieve over 35,000 fps at reduced resolutions.

FULLY INTEGRATED DESIGN

The HS7i offers a fully integrated design compared to our split unit version. This allows for more flexibility when collecting data on the go or in the field. The integrated design combines the camera and a full PC controller, letting the user collect, store and and process data from a single unit. High speed data collection has never been so easy. The HS7i offers the same accelerated workflow as our split unit HS Series cameras letting you maximize productivity and minimize file transport time. Plus with an optional Portability Kit, the HS7i is more flexible to use.



- Advanced architecture for enhanced workflow
- Integrated Linux OS and i5 computer is compatible with standard displays and input devices, including Bluetooth and WiFi
- Run your own applications on the camera.
- Attach high-speed high-capacity mass storage via USB3.2 or Thunderbolt 4 interfaces.

Designed with the end user in mind

The HS7i is designed with the end user in mind, whether for performing research in the lab or shooting high speed footage in the field. The optimized workflow gets data to the PC in blazing fast speeds. Combined with the Portability Kit for the HS7i, the universal V-mounted battery offers the highest level of flexibility on the go while the articulating mounted display provides easy of use with mulitple viewing angles. Fully detach the display and you can view and control the camera from any angle and at a distance.



Camera shown with optional Portability Kit





Specifications

| Sensor | 10-bit 1920 x 1080 CMOS with 10 <i>u</i> m pixels | | |
|---------------------|---|--|--|
| Minimum Exposure | 1 microsecond | | |
| Light Sensitivity | ISO 4800 (mono) | | |
| Calibration Shutter | Built-in mechanical shutter for black-level calibration | | |
| Camera Image Memory | 8GB, 16GB, or 32GB (in camera) | | |
| Mass Storage | Up to 1TB NVMe SSD (in camera)* | | |
| File Formats | Stacks – BMP, DNG (color), JPEG, TIFF (processed or raw) Video – AVI, CAP (raw), MP4, RDI | | |
| 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) | | |
| External I/O | 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 | | |
| Marker and Metadata | Image window playback time line, FasMotion o-scope mode, XML file | | |
| Control Software | FasMotion native on Camera OS, with network support and productivity bundle FasMotion (Windows/MacOS/Linux application) on networked PC, iOS app with Portability Kit | | |
| Operating System | Arch Linux with Cinnamon Desktop | | |
| Processor | 11th Generation Intel i5 @ 2.4GHz base, 4.2 GHz Turbo | | |
| OS Memory / Storage | 16GB DDR4 / 512GB SATA SSD | | |
| Graphics | Intel Iris Xe Graphics | | |
| Display | 2x HDMI 2.0b , 2x DP1.4a via Thunderbolt 4 (USB Type-C port) | | |
| 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 | | |
| Construction | Anodized machined aluminum housing | | |
| Environment | 0°C to +40°C | | |
| Power | Camera: 12v-20 VDC, 100W | | |
| Size and Weight | Camera: 112mm (4.4") W x 112mm (4.4") H x 120mm (4.7") D, 1.7 kg (3.8 lbs.) Battery: 73mm (2.9") W x 107mm (4.1") H x 53mm (2.1") D, 0.55 kg (1.2 lbs) | | |





HIGH SPEED WORKFLOW

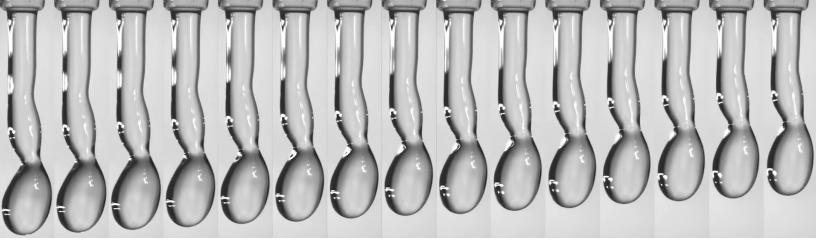
Accelerate your workflow with the HS Series cameras. The HS Series high speed cameras are designed to maximize productivity and minimize file transport time. Through its unique file transport system the HS Series camera offers up to 40 Gbps throughput, even when saving to external drives. This lets you spend more time working and less time waiting.

Example Frame Rates and Record 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 | 4 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 |

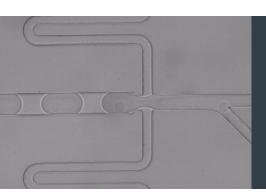
^{*}Streaming mode with "D" option only. ** Maximum frame rate.





Portability Configuration

With the Portability Kit the HS7i can be easily converted to an on-the-go units that are great for field work. The Portability Kit adds handles for shooting handheld footage and an iPad with articulating mount for viewing and controlling the camera both wirelessly or tethered through our fully featured iOS app. An attachable V-mount battery provides portability while the universal mounting style offers flexiblity in battery options. The The HS7i can be configured with the Portability Kit at the time of purchase or retrofitted as an upgrade.



Portability Kit Includes the following

- Removable right and left handles
- V-mount battery with hot swappable option
- iPad Mini for wireless or tethered display and control options
- Access to iOS app for wireless control
- Articulating iPad mount



