RDI TECHNOLOGIES



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.

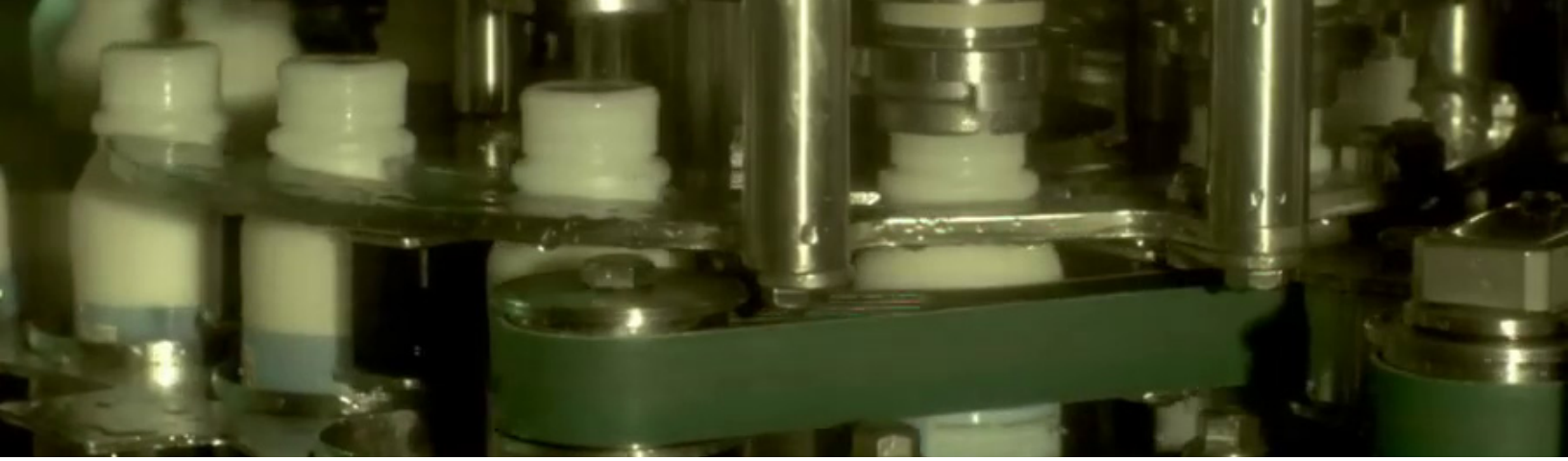


Camera shown with optional Portability Kit



Specifications

Sensor	10-bit 1920 x 1080 CMOS with 10*u*m pixels
Minimum Exposure	1 microsecond
Light Sensitivity	ISO 4800 (mono), ISO 2400 (color)
Calibration Shutter	Optional Built-in mechanical shutter for black-level calibration in remote mounting installations
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 DP1.4a via Thunderbolt 4 (USB Type-C port)
USB	1x USB3.2 (10G), 1x USB2.0, 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)



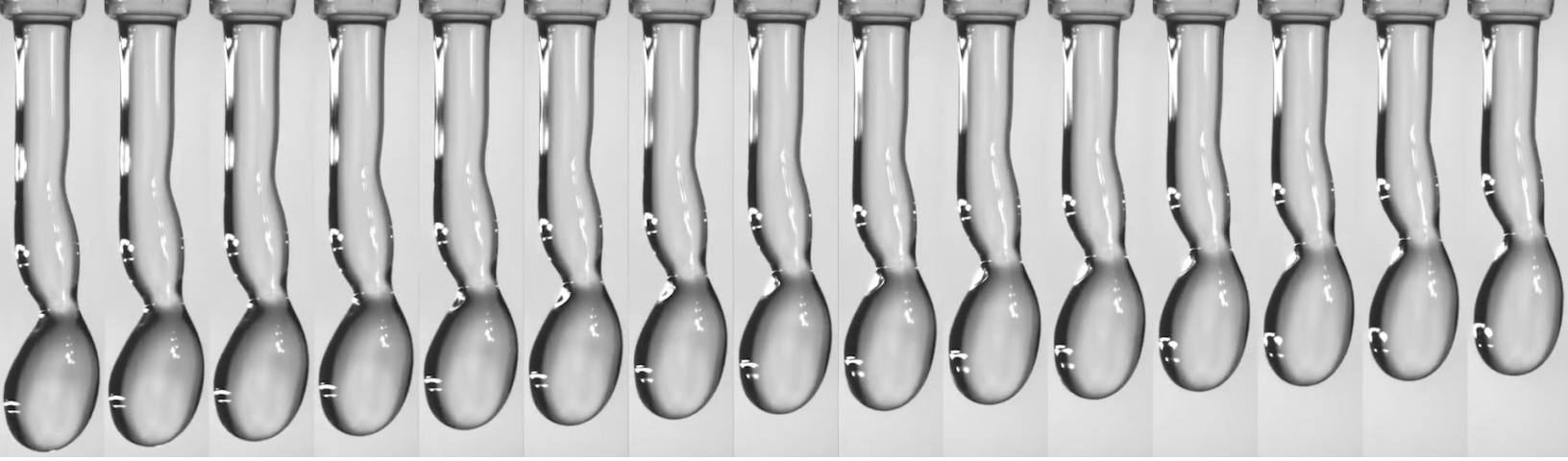
HIGH SPEED WORKFLOW

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

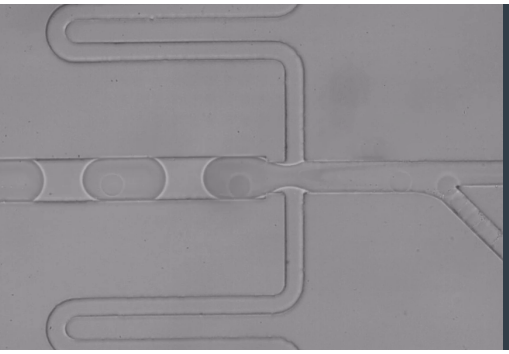
Resolution	Max Frame Rate 8 or 10 bits (Normal mode)	Record Time 8 bits to 32GB memory	Max Frame Rate 8 bits (Streaming to SSD)	Record Time 8 bits streaming to 1TB SSD*
1920 x 1080 (HD: 1080p)	2500 fps	6.6 sec	723 fps	11.2 min
1280 x 1024 (SXGA)	2634 fps	9.8 sec	1144 fps	11.2 min
1280 x 720 (HD: 720p)	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 a Microsoft tablet computer with articulating mount for viewing and controlling the camera both wirelessly or tethered through our FasMotion Windows software. 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
- Microsoft tablet computer for wireless or tethered display and control options
- Access to FasMotion software installed on a tablet computer for wireless control
- Articulating tablet computer mount

