

**THE SLOW MOTION CAMERA CO.  
FPS1000HD  
HIGH-SPEED CAMERA**

**AIMED  
RESEARCH**



**FPS1000HD Highlights:**

**High-Definition 1280x720**

**20,000fps Max Frame Rate**

**Up To 256GB Memory Capacity**

**Stand-Alone Operation**

**Saves in Adobe DNG raw  
(Adobe Digital Negative)**

**FPS1000HD Features:**

- **1280x720 CMOS sensor with 6.6µm pixel size, 12 bit image depth, and adjustable resolution. ISO adjustable from 100, 300, 600, to 1200.**
- **Up to 1,000 frames per second at full 1280x720 resolution and up to 20,000 frames per second at 640x60 resolution (Model FPS1000HD-256).**
- **C Lens Mount. Many C-mount adapters exist for manual control of popular lens types such as Nikon, Canon, and more.**
- **Exposure duration 50% of frame rate with global electronic shutter.**
- **64GB or 256GB memory options. Captured video recoverable after powering down (non-volatile memory).**
- **Black reference calibration for optimal image quality.**
- **On-camera triggering or external trigger input for TTL or closed contact trigger devices. Trigger signal output available.**
- **Accepts commonly available 18650 Li-Ion batteries (x2) providing 1-2 hours of run time.**

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**FPS1000HD-256 Resolutions:**

<b>Resolution</b>	<b>Frame Rate</b>
1280x720	1,000fps
1280x480	1,500fps
1280x360	2,000fps
1280x240	3,000fps
1280x180	4,000fps
640x360	3,000fps
640x180	8,000fps
640x60	20,000fps

\*Maximum record time of 120 seconds for 256GB model.  
Frame rates differ for 64GB model. Maximum record time of 60 seconds for 64GB model.

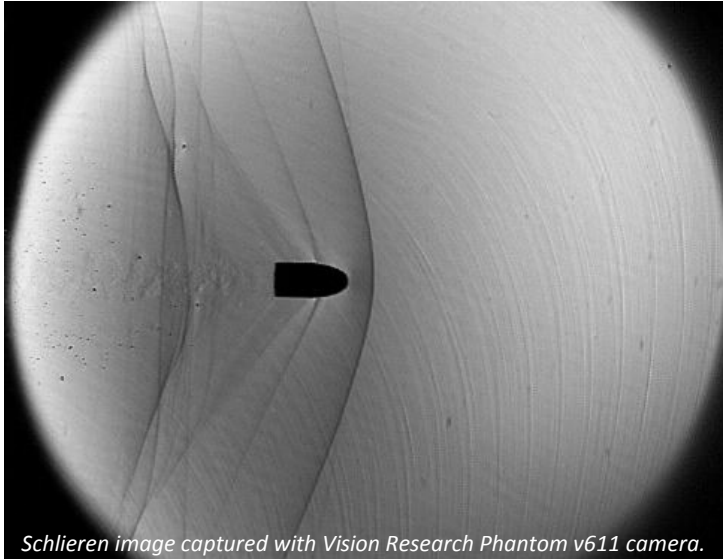
**FPS1000HD Features (Continued):**

- Touchscreen controls with 5 inch display.
- MicroSD card slot.
- USB 3.0 high-speed port.
- Genlock for synchronization.
- Saves in uncompressed DNG raw format (Adobe Digital Negative). These files can be post-process converted to other video formats.
- Active cooling with multiple fans.
- Anodized aluminum body.
- User removable IR cut filter.
- Power Input 7-12VDC, 3A
- Weight: 1.5 lbs without lens.
- Dimensions: 5.63 x 4.06 x 1.69 inches without lens.

**Price Sheet**

*For reference only, prices may change without notice.*

<b>FPS1000HD High-Speed Camera 256GB Model</b>	<b>\$2,550</b>
<b>FPS1000HD High-Speed Camera 64GB Model</b>	<b>\$2,175</b>
<b>No-Cost Options:</b>	
<b>Color or Monochrome Image Sensor</b>	
<b>Shipping (2-Day Air From UK)</b>	<b>\$100</b>
<b>Universal Power Adapter</b>	<b>\$18</b>
<b>Rechargeable Lithium Battery Kit</b>	<b>\$50</b>
<b>Battery Charger</b>	
<b>Lithium Batteries (Qty 4)</b>	
<b>Computar 12.5-75mm Zoom Lens (New)</b>	<b>\$379</b>
<b>Computar 12.5-75mm Zoom Lens (Used)</b>	<b>\$250</b>
<b>Macro Extension Tube Set</b>	<b>\$35</b>
<b>(0.5mm, 1mm, 5mm, 10mm, 40mm)</b>	
<b>C-Mount to Nikon Lens Adapter</b>	<b>\$50</b>
<b>C-Mount to Canon EF Lens Adapter</b>	<b>\$70</b>



*Schlieren image captured with Vision Research Phantom v611 camera.*

**Aimed Research Capability Highlights:**

**High-Speed Camera Rentals At Industry-Low Prices**

**Multi-Camera Synchronization**

**High-Speed Schlieren Imaging Of Invisible Gradients**

**Sensor Data Acquisition Correlated To Frame Exposures**

**Aimed Research Specific Video Capabilities:**

- VariMag system available for adapting to various microscopes.
- Multiple Phantom v611 cameras available for synchronization.
- Beamsplitter optical setup available with limited applications for 180° out-of-phase frame capture. This would allow the combined images to be reviewed or stacked into a new image sequence resulting in double the frame rate for a given resolution compared to a single camera.
- High-speed schlieren setups available with 6in, 8in, or 12in optics for viewing invisible phenomena like shock waves and other pressure, heat, or chemical gradients, and various turbulent flows. Aimed Research's setups may provide increased depth of field at  $f/11$  to  $f/16$  while operating at sub-microsecond exposures (as fast as 285 nanoseconds).
- USB-based data acquisition systems available for sensor data capture correlated with instant of frame exposure.

*This FPS1000HD data sheet is for reference only. For detail-critical applications, please discuss the specification details directly with the manufacturer, The Slow Motion Camera Company Limited.*