Key Benefits:

The Phantom® Miro® 320S takes high speed imaging to the next level by combining the compact design of our latest Miro family with the resolution, speed and workflow possibilities of professional HD camera systems.

The Miro 320S is available in two models, the original M320S and the newer LC320S, which includes a flip-out LCD touchscreen for on-camera monitoring and controls. Both models are capable of recording at resolutions beyond HD at speeds up to 1380 frames-per-second (fps), and also include a single HD-SDI output for alternate monitoring and workflow possibilities.

All Miro-M and LC cameras ship standard with a rechargeable battery and our powerful CineFlash® system. When used together with the Phantom RCU, the camera can be mounted remotely and all recording remains conveniently self-contained.

Key Features:

- 12 bit, 2 Megapixel CMOS sensor
- 1920 x1080 @ 1540 FPS
- 35mm depth of field
- ISO (ISO 12232 SAT method): 8900T mono, 1100T color
- Compact, rugged design
- PL, Nikon F, and Canon EOS lens mounts
- Phantom RCU compatible
- LC320S includes flip-out LCD touchscreen for on-camera image monitoring and control
- HD-SDI output
- Rechargeable battery
- Phantom CineFlash storage system
  - CineFlash modules up to 240GB
  - CineFlash Dock
  - eSATA connectivity

Phantom® Miro® M & LC320S Digital High-Speed Cameras

The Ultimate Compact Solution for Production and Digital Media Applications
Miro® M320S and LC320S

Based on the award-winning technology of Phantom cinema cameras, Miro M and LC320S cameras take quality, portability and performance to the next level.

Versatility

The Miro product family follows the Phantom tradition in versatility by adapting to several imaging applications, and the Miro 320S is no exception. With precise control over resolution, frame rate, exposure time and trigger point, this camera is ideal for applications ranging from industrial & scientific, to new media and TV production.

The Miro 320S is available with a variety of lens mounts, including Canon EOS, 35mm PL, Nikon-F, and C. Optical low-pass filters are also available for applications where image quality is key. The EOS mount enables the use of Canon’s EF and EF-S lenses, which can be controlled from the RCU, Phantom PCC software, or an aperture ring on the mount itself. Remote control of aperture and focus is a huge benefit when cameras are remotely located and/or difficult to reach.

Workflow & Phantom CineFlash Storage Solution

Directly record to up-to 12 Gigabytes of internal memory and preview the shot immediately by playing back over HD-SDI, or Gb Ethernet. Save your shot by editing the clip and quickly transfer to an installed Phantom CineFlash drive. Alternatively, record the HD-SDI playback to a separate device. Re-arm the camera and you’re ready for the next shot.

CineFlash drives are available in sizes up to 240 Gigabytes, and offer write speeds of 4GB/minute. A full 12 GB Cine will save in less than 3 minutes.

At the end of the day, or once the drive is full, simply remove it from the
camera and download Cine Raw files via the CineFlash Dock or over the camera’s Ethernet. The CineFlash Dock connects to your computer via eSATA for speedy downloads.

Phantom Cine Raw files can then be processed using Phantom PCC to take further advantage of the Miro M & LC-Series advanced color processing, which includes user-defined color matrices, color temperature settings and tone curves.

Specifications

The Miro 320S is based on a >2Mpx sensor with 3.2 Gpx/s throughput. This means frame rates of approximately 1380 fps at 1920 x1200, with higher frame rates at lower resolutions. This camera has 12-bit pixel depth, and uses micro-lenses on its custom-designed CMOS sensor to achieve exceptional light sensitivity.

The Phantom Miro 320S is available with 3GB, 6GB or 12GB of internal RAM Memory. Expected record times and maximum frame rates per resolution can be found in the tables to the right.

Enhance your workflow with Phantom Accessories

The Phantom Remote Control Unit (RCU), is a valuable accessory for both the Miro M320S and LC320S, offering complete control when the camera is mounted remotely. When paired with the M320S specifically, it enables remote operation and monitoring, creating a fully portable high speed imaging solution.
Vision Research offers a variety of standard and cinema-style accessories for mounting, power, handling and monitoring. Ask your Phantom sales rep for more details.

**Accessibility**

The advanced features and small, lightweight form factor makes the Miro M and LC320S the most accessible Phantom high speed cameras available today. Compatible with a vast array of applications, the Miro can be used for scientific research, as a creative storytelling tool, and anywhere in between. The possibilities are endless with the Phantom Miro 320S at your fingertips.

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**DATA SHEET**

**Phantom® Miro® 320S**

Digital High-Speed Cameras

**Additional Features:**

- Image-based Auto Trigger
- Continuous Recording
- Auto-Exposure
- Multi-cine Acquisition
- Internal Mechanical Shutter
- Gb Ethernet
- Rechargeable Battery (Sony BP-U30 or BP-U60)

**Size and Weight:** 3.0 lbs, 1.4 kg; 7.5 x 3.5 x 4 inches, 19 x 19 x 10 cm (L, W, H)

**Operating Temperature and Humidity:** 0º C to 40º C @ 8% to 80% relative humidity, non-condensing

**Tiered Service Contracts to protect your investment**

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Vision Research has been shooting, designing, and manufacturing high-speed cameras since 1950. Our single focus is to invent, build, and support the most advanced cameras possible.

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AMETEK Vision Research’s digital high-speed cameras are subject to the export licensing jurisdiction of the Export Administration Regulations. As a result, the export, transfer, or re-export of these cameras to a country embargoed by the United States is strictly prohibited. Likewise, it is prohibited under the Export Administration Regulations to export, transfer, or re-export AMETEK Vision Research’s digital high-speed cameras to certain buyers and/or end users. Customers are also advised that some models of AMETEK Vision Research’s digital high-speed cameras may require a license from the U.S. Department of Commerce to be: (1) exported from the United States; (2) transferred to a foreign person in the United States; or (3) re-exported to a third country. Interested parties should contact the U.S. Department of Commerce to determine if an export or a re-export license is required for their specific transaction.