

## DATA SHEET

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Subject to change Rev February 2017

# Phantom® Miro® N-Series Digital High-Speed Camera

Tiny, Hi-G camera gives  
big Impact

### Key Features:

#### Miro N5 CAMERA HEAD

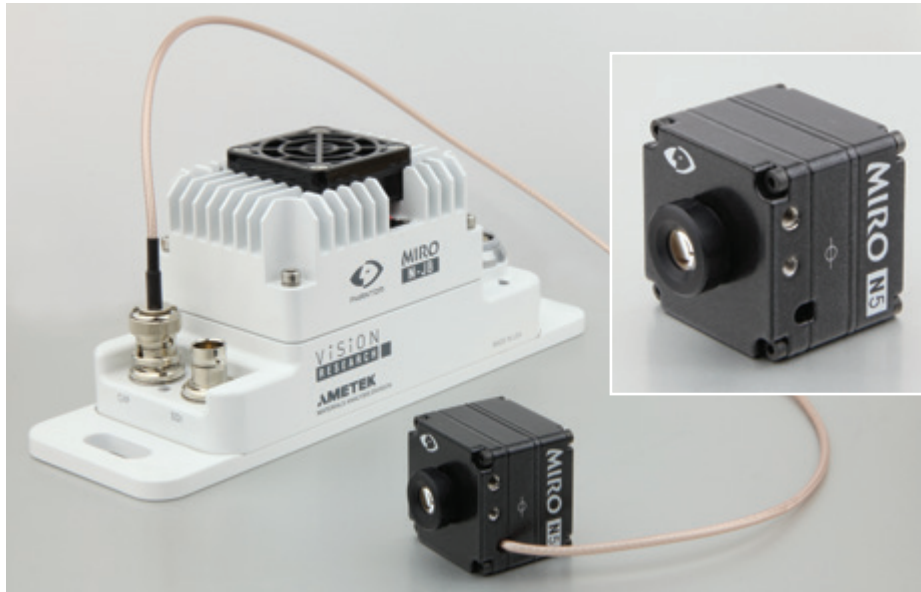
10-bit 0.5 CMOS sensor  
250 Megapixel/s  
560 fps @ 768 x 600  
30 fps minimum at all resolutions  
M-12 / S-mount lenses  
ISO: Mono: 4000 T\*, 2000 D\*  
Color: 400 T, 400 D\*  
Compact cube design  
Hi-G: 170G Shock, 20.7Grms Vibe,  
IAW MIL-STD-202G  
CXP Cable, CoaXPress protocol  
Interchangeable to base

#### Miro N-JB BASE

Powered through Miro J-Box  
Hi-G: 170G Shock, 20.7Grms Vibe,  
IAW MIL-STD-202G  
8GB memory  
128GB internal CineFlash  
Battery backup to protect data  
HD-SDI  
Compatible with RCU




\*Measured according to ISO 12232:2006 method

**AMETEK®**  
MATERIALS ANALYSIS DIVISION



### Key Benefits:

#### WHEN IT'S TOO FAST TO SEE, AND TOO IMPORTANT NOT TO®

-  Small camera head fits in hard to reach places
-  Ultimate data protection through the CXP cable
-  Hi-G, for demanding applications

The Phantom Miro N-Series digital high-speed camera brings maximum flexibility in accessing hard to reach places. The system has **three simple, interchangeable components** and flows seamlessly into the Miro Junction Box.

**Miro N5 Camera head:** A small **cube camera head** measuring just 32mm x 32mm x 28mm, **this tiny camera head can do big things**. The 0.5Mpx sensor achieves 250 mpx/s, with 560 frames per second (fps) at maximum resolution of 768 x 600 and over 1,000 fps at 512 x 472.

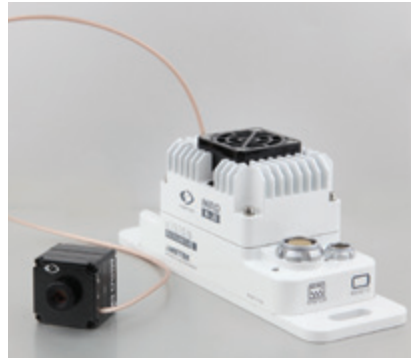
**CXP cable:** All images and signals are transferred instantaneously through the CXP cable, using standard CoaXPress protocols. **Every last image is safe** if the head or cable is damaged. The 3 Meter cable is strain relieved in the head, field-replaceable, and provides ample length to position the camera head.

**Miro N-JB Base:** The Base functions like a Miro C210J camera, complete with 8GB of RAM, 128GB internal CineFlash, and battery for back-up. It connects to the Miro Junction Box through a System Cable. It measures 187mm (L) x 53.5mm (W) x 75mm (H) with a Miro JBox bolting pattern for convenient mounting.

All components are interchangeable for maximum convenience and flexibility, and the system is Hi-G and tests to 170G Shock and 20.7Grms Vibe.

### Miro N5 Specifications

The Miro N5 camera is based on a 0.5Mpx CMOS sensor that provides 560 fps at 768 x 600 and higher frame rates at lower resolutions. The 10-bit sensor is 4.68 mm diagonal and available in color or monochrome. The head has a fixed aperture and accepts S-mount lenses.



Phantom Miro N5 and Miro N-JB Base

### Miro N-JB Base

Each Miro N-JB Base controls a Miro N-Series camera head via the CXP cable connected with a BNC. It connects to the Miro Junction Box (JBox) with just a single System cable to receive power and transfer signals and images. A second BNC provides an SDI connection to easily connect a monitor. It also can connect to the Remote Control Unit as another option for ease of use.

### Miro Junction Box

The Base connects to the Miro Junction Box (JBox) via a System Cable. The JBox is **flexible**: With six camera ports, it can host six cameras or dedicate any port to uplink another JBox in a daisy chain or tree branch. It is compatible with all **Miro N, C, R, M, LC, and 3-Series**, and recognizes the Miro N-Series head and base as one camera unit. The Miro Junction Box provides **Power & Signaling** to all connected cameras through the Systems cable.



### Vision Research Global Support - for wherever you are



Miro JBox supports Miro cameras, including the Miro N-Series

Our Miro Digital High-speed camera line is supported by Vision Research's Global Service and Support network offering AMECare Performance Services from multiple sites around the globe. Maximize the value of your Phantom camera by learning more about our service and support options at [www.phantomhighspeed.com/Support/](http://www.phantomhighspeed.com/Support/)

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.

## DATA SHEET

### Phantom® Miro® N-Series Digital High-Speed Camera

#### Additional Features:

- Image Based Auto trigger
- Continuous Recording
- AutoExposure
- Multi-Cine Acquisition
- Extended Dynamic Range (EDR)
- Rechargeable, Internal battery
- Dimensions:
  - Miro N5 Head: 32mm (L) x 32mm (H) x 28mm (D)
  - Weight: 0.09kg (0.2lb)
  - Miro N-JB Base: 187mm (L) x 53.5mm (W) x 75mm (H)
  - Weight: 0.64kg (1.4lb)
- Tiered Service Contracts to protect your investment

Resolution	Maximum fps
768 x 600	560
768 x 480	690
640 x 480	815
512 x 512	930
512 x 384	1195
256 x 256	2325
256 x 128	3570
128 x 64	4870
128 x 32	9055

#### Resolutions Providing 1000 fps

Resolution	Maximum fps
480 x 480	1040
512 x 450	1045
512 x 472	1000



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