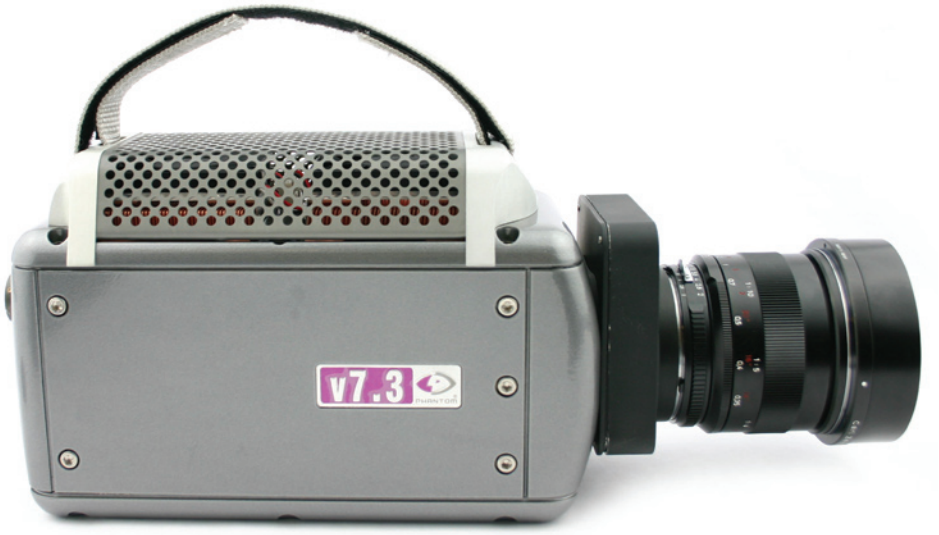
VISION RESEARCH
An AMETEK® Company

PHANTOM®
when it's too fast to see, and too important not to.®

DATA SHEET



Lens Shutter On Camera

V-Series Lens Shutter

Hands-free CSRs

Remote CSRs

Access to all camera signaling

Key Benefits and Features:

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

One of the most popular features on our newest Phantom cameras is an internal **mechanical shutter**. It is used to automatically shade the sensor during a Current Session Reference (CSR). This allows the camera operator to do a CSR without manually capping the lens.

Because of the overwhelming popularity of this feature, we've decided to bring it to our existing line of V-Series cameras – the v5.2, v7.3, v9.1 and v10.

To **take advantage of this feature** simply:

- Replace the existing Nikon lens mount with the new V-Series Lens Shutter accessory
- Update the firmware in the camera, if required
- Use our new Active Break-out-Box instead of the existing capture cable
- And, use Phantom software release 670, or later

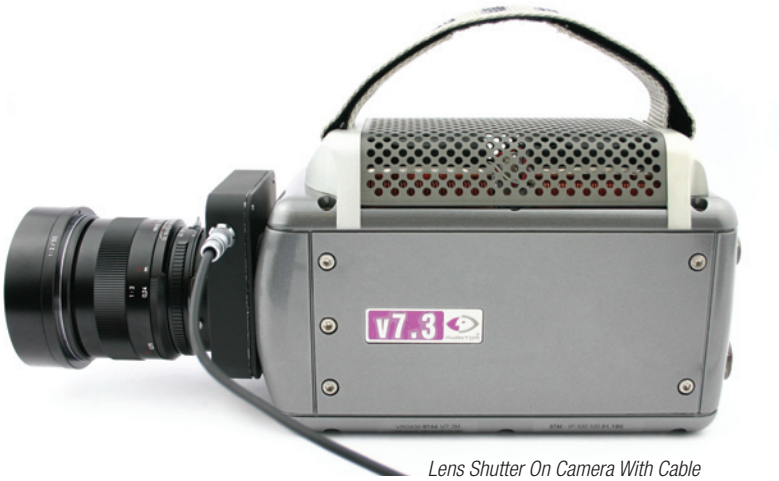
Everything you need to upgrade your camera and software is included in the **V-Series Lens Shutter Kit**: VRI-EXTSHUTTER-F-MOUNT. Or, if you want Vision Research to do the camera upgrade for you, order VRI-EXTSHUTTER-F-MOUNT-UPG, and return the camera to us. To have the shutter added to a new camera order, specify the option VRI-EXTSHUTTER-F-MOUNT-OPT.

V-Series Lens Shutter Accessory:

Lens Shutter Front

Lens Shutter Side

Lens Shutter Back



Lens Shutter On Camera With Cable

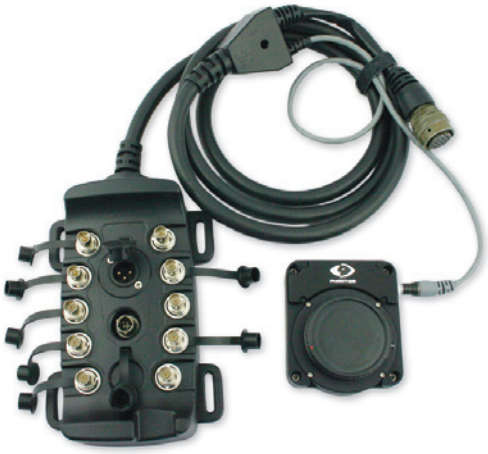
DATA SHEET
V-Series Lens Shutter

How it Works:

The V-Series Lens Shutter simply replaces your existing F-mount on the camera. So, you continue to use your existing lenses. Exchange the existing capture cable with the included break-out-box, and connect the shutter control cable from the break-out-box to the shutter. Now, any time you do a CSR, the shutter will close, the black reference will be performed, and the shutter will reopen, ready for the shot.

You will want this feature for every existing V-Series camera! The **convenience** of not manually capping the lens during a CSR translates into higher productivity and better image quality. And, it enables doing a CSR in situations where it was previously impossible (with unattended cameras, for example).

The new **Break-out-Box** gives you access to every available signal on the camera's capture cable:



- IRIG-In
- IRIG-Out
- Video Out (75 ohm, composite)
- Trigger
- Event
- Strobe
- F-Sync / A-Trig
- Pre-Trigger / Memgate
- Ready
- Power-In (24V, both a 4-pin Amphenol and 3-pin XLR connector are available)
- Genlock (on some models)

(Pre-Trigger and Memgate still share a connector and must be selected in software.)

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Technical Specifications:

Power: 20-36 VDC, 1.2 Watts idle, 2.4 Watts active

Open/Close Time: Less than 1 second

Self Test: On power up

Interface: RS-232, 38400 Baud

MTBF: 40,000/cycles

Shock: 70g sine wave in all three axes, no shutter position displacement when powered

Weight: 13 oz.

Connector: Fischer DG102Z054130

Operating Temperature: -5˚C to +45˚C

Size: 40 x 80 x 100 mm

Focused

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

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