

Visual Instrumentation Corporation

High-Speed Imaging Technology

AVATAR 10.5mm Hi-g Lens

for high-speed imaging cameras

The new AVATAR 10.5mm Hi-g lens is designed specifically for cameras with large digital image sensors. It features heavy duty mechanical design and construction for very Hi-g applications such as; crash testing, impact sled, airborne and related testing environments.

An Avatar lens was recently tested on a Hi-g automotive sled in x, y and z axes in forward and reverse orientations. It was subjected to twelve separate test cycles at 100g's peak shock loads and average sustained loads of 70g's. A detailed post test lens inspection revealed no failure or discernable external or internal damage.

Avatar optics feature high-efficiency multi-layer coatings with digital resolution that exceeds 6-million pixels. In addition, both focus and aperture rings feature 360° clamps locks .

A custom designed stainless-steel lens mount is provided for each camera. It replaces the standard lens plate supplied by the camera manufacturer. The Avatar lens is now attached to this new mount, which also incorporates a built in C-Mount. In addition, an optional heavy duty F-Mount is available with positive lock that eliminates the traditional Nikon lens loose bayonet fit.

An accessary Micrometer Diascope instrument can be used to measures the exact back-focus dimension of each camera. This calibration determines the necessary spacer shims to install between the steel mount and the camera housing. Thereafter, Infinity focus is achieved. Refer to the Micrometer Diascope data sheet for details.

Specifications

Focal Length: 10.5mm Lens

Aperture: f/2.8 Image Circle: 28mm

Length: 3.60" or 92.0mm

Diameter: 2.65" or 67.00mm (maximum)
Weight: 1.20 pounds or .55kg

Shock: Designed for 100g's at 5ms, all axes



Fits Redlake HG-100K/XR Camera



Fits Phantom v5.1, v7.1, v9.1 and v10 with Hi-g QD-100 mount



Redlake HG-TH camera with Hi-g mount



SpeedCam g^2 with UQ Heavy-Duty F-Mount



UQ Heavy Duty Nikon F-Mount



Fits DRS LTTC Camera

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