

## 120mm f/4.5 Macro UV-IR Apochromat

The MegaVision 120mm f/4.5 Macro UV-IR Apochromat is an innovative view/technical camera lens that incorporates both floating element and advanced UV-VIS-IR apochromatic color correction technology. Six ED glass elements and one aspheric element are used to achieve an unprecedented level of performance for multispectral documentation, forensics, scientific imaging, and fine-art photography. After setting focus in visible light, no refocusing is necessary for either ultraviolet or infrared imaging, thus enabling extremely precise color channel registration in multispectral applications. The excellent color correction is also valuable in visible light photography because it completely eliminates the purple fringing suffered by other lenses in high contrast outdoor scenes. The adjustable floating element, unique among view camera lenses, ensures superb optical correction at all object distances.

The UV-IR Apochromat is available with either a standard or digital copal-0 shutter. The digital shutter can be controlled with MegaVision's very compact USB AutoStop<sup>TM</sup> controller, providing both power and control over USB from a host computer. The controller provides a sync output, enabling control of cameras and lights with sync trigger inputs.

#### **SPECIFICATIONS**

Focal length 120 mm Aperture range f/4.5 to f/45 Waveband 320 to 1100 nm f/4.5 70 mm Image circle Image circle f/16 100 mm Length 118 mm Max. diameter 75 mm Weight 726 grams Min. object distance 0.47m Max. image scale 1:1 Shutter Copal #0

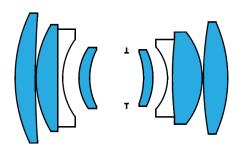


#### LENS DESIGN:

9 Elements in 7 groups 6 ED elements 1 aspheric element



**Aspheric** 

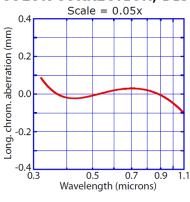


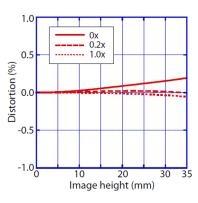


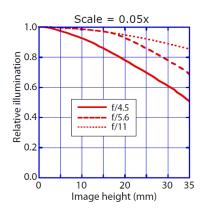
Hyperspectral Macro Apochromat shown above with manual Copal-0 Shutter and at left with digital shutter. Digital shutter may be powered and controlled over USB using Photoshoot Control software or other applications. While the digital shutter integrates seamlessly with MegaVision's digital backs and is incorporated into the EV camera, MegaVision PhotoShoot Control software enables shutter operation with other digital backs and in other capture environments.

# The First Name in Digital Imaging

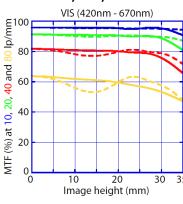
### **COLOR CORRECTION, DISTORTION, ILLUMINATION:**

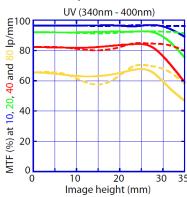


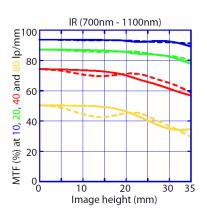




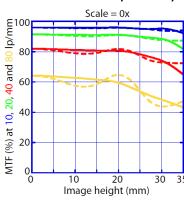
MTF: VIS, UV, IR for scale = 0.05x at f/5.6

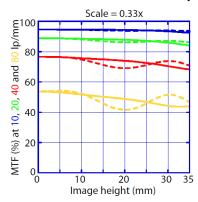


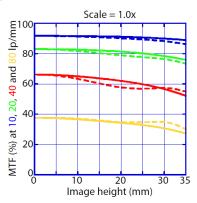




MTF: Scale = 0x, 0.33x, 1.00x for VIS waveband at f/5.6







MTF: f/4.5, f/8, f/16 for VIS waveband at scale = 0.05x

