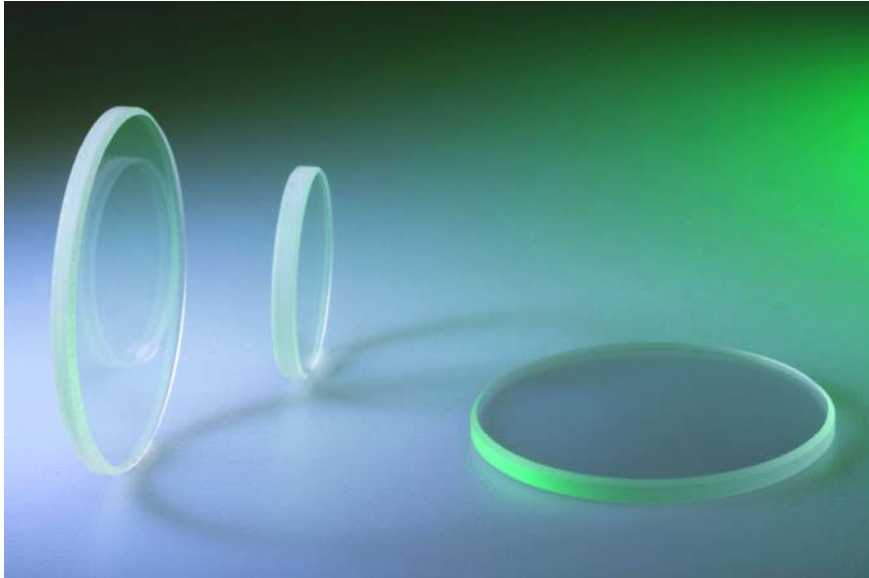
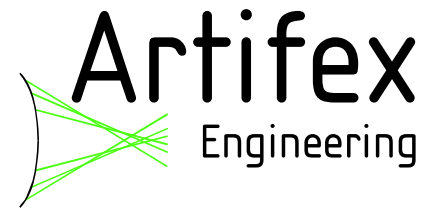


## MIR Waveplates

Mid-IR: 2940nm to 7000nm!



Artifex Engineering now supplies a range of waveplates for use in the Mid-IR. These items are fabricated from high quality IR-grade MgF2 crystals providing high transmission and very low wavefront distortion.

Due to the long operational wavelengths, we provide most of these plates in "true zero order" format. This ensures the highest performance with regards to temperature and wavelength independence as well as power handling capability.

A range of standard items are available with the following specifications. We will gladly fabricate to your custom specification of size, shape and wavelength.

### Specifications:

Material: MgF2  
Diameter: 12.7mm and 20mm +0.0/-0.2mm  
Wavefront distortion: L/8 @ 633nm  
Retardation Tolerance: L/100  
Parallelism: <3 arc second  
Surface Quality: 40-20  
Clear Aperture: >90%  
Coating: R<0.5% @ 0° AOI

### Standard wavelengths:

$\lambda/2$ : 2940nm, 3000nm, 3500nm, 4000nm, 4500nm, 5000nm, 5500nm, 6000nm, 6500nm, 7000nm

$\lambda/4$ : 2940nm\*, 3000nm\*, 3500nm\*, 4000nm\*, 4500nm, 5000nm, 5500nm, 6000nm, 6500nm, 7000nm

\* optically contacted, zero order. All other plates: monolithic, true zero order.