Our customers use aspheres in beam expanders, collimators, airborne imaging systems, telescopes, and as focusing elements for high-energy lasers. Aspheric systems offer the advantages of compact geometry and enhanced performance. We design and manufacture parabolas, hyperboloids, ellipsoids, cylinders, and freeforms. We work in all glass types and specialize in optics made from Silicon Carbide for space and aerospace applications. Our applications engineers work with you to define specifications matching your product performance demands and can plan options for prototyping through production.
Our Special Advantage

We tolerance and inspect aspheres the way they are used so your optics always perform the way you expect. We control metrics like reflected wavefront error but also focus density and power spectral density. These less common metrics allow us to control diffractive errors common to aspheric optics.

We speak your language and adapt to the needs of our customers. We don’t shy away from challenges and our professional staff will help you navigate through new product development into production.

Our applications engineers are ready to support you.

APERTURE OPTICAL SCIENCES INC.
A passageway for light and innovation

Aperture Optical Sciences designs and manufactures precision optics components and systems for space–based imaging and optical communications, high energy lasers, airborne imaging, and industrial machines and instruments. We employ advanced technologies for making high resolution satellite telescopes, aspheric mirrors, and have championed the implementation of Silicon Carbide Optics in the commercial marketplace. We add value by providing rare expertise in robotic optical fabrication, design for manufacturability and assembly, and verifying product performance using advanced optical metrology.