KNIGHT OPTICAL

Discover how we can improve your instrumentation and supply chain experience today!

KO | BRINGING QUALITY INTO FOCUS

www.knightoptical.com | Tel: +1 401 583 7846 | Fax: +1 401 583 7851
Knight Optical (USA) LLC | 1130 Ten Rod Road, Suite D102 | North Kingsdown RI 02852 USA
www.knightoptical.com | Tel: +44 (0) 1622 859444 | Fax +44 (0) 1622 859555
Knight Optical (UK) Ltd | Roebuck Business Park | Harrietsham | Kent ME17 1SB UK

LIDAR Components for Atmospheric Sensing

Knight Optical offers a range of Tx/Rx Windows and other optical components for use in LIDAR system for Atmospheric Sensing.

Knight Optical can offer transmit and receive windows and mirrors for LIDAR systems using visible, NIR (0.9 to 1.5µm) and Mid-Waveband Infra-Red (MWIR, 3 to 5µm) light. Since the 1960s, scientists have used LIDAR (light detection and ranging) to study the atmosphere. Short pulses of laser light are used to detect particles or gases in the atmosphere, like a radar bounces radio waves off rain drops in clouds. A telescope collects and measures reflected laser radiation, like a radar dish collects the radar signal, leading to a profile of the atmosphere's structure along the path of the laser beam. Researchers can then determine the location, distribution, and nature of atmospheric particles and molecular species using an advanced LIDAR method called the Differential Absorption Lidar (DIAL) technique.

We hold a large inventory of glass and mirror substrates to quickly meet your stock or custom requirements.

- Stock sizes from 5mm to 300mm diameter; between 0.5mm – 15mm thick.
- Custom shapes and sizes available to quotation, including “donut” windows.
- Custom reflective and antireflective coatings.

Typical specs:

Material:	BK7, Borosilicate, Quartz, Fused Silica or Sapphire (AL_2O_3)
Diameter Tolerance:	+0.0/-0.20 mm
Length/Width Tolerance:	+/- 0.10mm
Thickness Tolerance:	+/-0.10mm
Wavelength Range:	0.17 – 5.5µm
Transmission:	Tavg=85% dependant on substrate thickness

All of our LIDAR optical components are fully inspected for quality in our ISO 9001 certified, state-of-the-art Metrology laboratory. This allows us to work to the highest QA standards and meet the tolerance specifications on these **precision components.**

Contact our technical sales team to discover how Knight Optical’s high quality Lidar Optics superior service can improve your instrumentation and supply chain experience.
UK, Europe, Asia & RoW: E-Mail info@knightoptical.co.uk Tel +44 (0)1622 859444
USA & Canada: E-Mail usasales@knightoptical.com Tel +001 401-583-7846

- View our QA and metrology information
- Watch our Corporate Video
- View Our Corporate Brochure