

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

KO | BRINGING QUALITY INTO FOCUS

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Knight Optical supplies a comprehensive range Custom Laser Mirrors

Knight Optical supply custom laser mirrors for use at specific laser lines from the UV (200 to 400nm) to the IR (1to 40μ m) wavebands.

The laser mirrors can be custom made to include the following range:

- 1 YAG laser mirrors (High power grade)
- 2 Excimer laser mirrors (High power grade)
- 3 Argon-ion laser mirrors (High power grade)
- 4 Diode & broadband (Ti:Sapphire)

These mirrors are made from vacuum depositing thin films of material that have differing refractive indices & thickness onto suitable substrates. Typical custom laser mirror substrates are calcium fluoride, germanium, sapphire, fused silica and Zinc Selenide which produce a high efficiency reflecting surface at the laser wavelength. The coatings are assembled assuming that the mirror will be working in the plane of incidence. This is essential as any off-axis angles will push the pass band toward the shorter waveband that could be beyond the pass band for one or both polarizations (s and p). If off-axis reflections are needed, such as at 90°, then this coating needs to be applied for an Angle of Incidence (AOI) of 45°.

Custom capabilities:

Thickness: 2mm to 10mm+
Parallelism: < 3 arcseconds
Surface form: < 0.1 fringes

Surface quality: < 10:5 Peak reflectivity: > 99.8% **Material options:** Fused silica, BK7 or equivalent

Coating options: Argon-lon, Eximer, Nd:YAG, Diode Laser

View PDF <u>Capability - Laser Mirror</u>

All our Flat Mirrors are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory. This allows us to work to the highest <u>QA standards</u> and meet the tolerance specifications on these precision components.

<u>Contact our technical sales team</u> to discover how Knight Optical's high quality Plane Mirrors and superior service can improve your instrumentation and supply chain experience.

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