

OPTICAL COMPONENTS FOR 1 μm CLASS LASERS FOR PULSED AND CW LASERS

For laser applications in Industry,
Large Facilities and Research

- > Feasibility studies and design service
- > From prototype to mass production
- > From small to large dimensions
- > For high laser damage threshold
- > Size: few mm^2 to 200mm diameter
- > Larger dimensions on request

Features of 1-1,1 μm Coatings	
Coating type	Dielectric coatings based on oxides
Coating process	Plasma Ion Assisted deposition (dense coating) In-situ optical monitoring 900m ² of clean room ISO5 to ISO8
Cosmetics	5/C 1x0.16 per 25mm pupil according to ISO 10110-7 S/D 40-20
Environmental compatibility	Suitable for severe environments (ATOX, radiations, vacuum, humidity...) Space heritage available upon request Cleanable
Coating free areas	Coating free areas masked upon request

Type	Nominal	Custom options
Thin Film Polarizer (on Fused Silica substrate)	Tp >98.5% Ts <0.1% Extinction ratio 1000:1 AOI 57.5° LIDT: 10J/cm ² , 10ns, 1064nm	AOI 45° Higher extinction ratio Blocking of unwanted other wavelengths
Antireflection coating (on Fused silica or BK7 substrates)	R<0.1% AOI 0-15° LIDT: 30J/cm ² , 10ns, 1064nm	Higher AOI Dual-band AR: 1064/1550nm, 1064/800nm, 1064/532nm
Antireflection coating (on high index substrates)	R<0.2% AOI 0-15° LIDT depends on substrate	Higher AOI Dual-band AR: 1064/1550nm, 1064/800nm, 1064/532nm
Beamsplitter (on Fused Silica substrate)	Rp/Tp Tolerance: +/-2% AOI 45° Available ratios: 50/50%; 67/33%; 75/25%; 80/20%; 83/17%	Other R/T ratios S-polarization
Dichroic (on Fused Silica substrate)	Long-pass coating 1064/830nm Ts & Tp (1064 nm) > 98% Rs & Rp (830 nm) > 99% AOI 45°	Short-pass coating 1064/532nm, 1064/355nm Other AOI
Laser mirror (on Fused silica or BK7 substrates)	R>99.5% (AOI 0-15°) Rp>99%, Rs>99.3% (AOI 45°) LIDT: 45J/cm ² , 10ns, 1064nm	Zerodur®, metallic substrates



Spectral measurements

