

Optical Coating

Unifibre can provide a wide variety of coatings from simple single layer AR coatings using Mg F2 and mirror coatings to complex multilayer dielectric stacks. Typical types of dielectric coatings are BBAR, V-coatings, Dual wavelength AR coatings and HR coatings. Sharp cut-on and cut-off filters are also available. Please contact us, if our standard coatings described in this chapter cannot meet your requirements. Our engineers can design a special coating for you.



Coating Type		Properties and Application
Super UV Antireflection (New !)		With coating technology improvements, we can provide the super UV Antireflection coating. It has extremely low absorption at UV wavelength. For example, absorption is less than 0.5% @ 266nm.
Antireflection	Single Layer MgF2	Applied to materials with refractive indices from 1.45 to 2.4. The most popular antireflection coating for visible. They are insensitive to change in incidence angles.
	Multilayer "V"	Used to provide low reflectance within a narrow durable wavelength band for most laser application. Minimum reflection can be less than 0.1%
	Broadband Multilayer	These coatings have excellent performance over a broad spectral range broadband. Coating performance is sensitive to angle of incidence.
	Dual Wavelength Band	Offer very low reflectance at two widely spaced wavelengths, such as Nd:YAG Laser (1064) and its second harmonic (532). Double wavelength waveplate.
Partial Reflection & Beamsplitter	Narrow Band	Provide 50% reflection and transmission at an angle of 45deg. incidence for a single wavelength. Perfect for beamsplitters application. Transmission/reflection (T/R) ratio of 20/80, or others for Beamsplitter is available upon request.
	Broadband	Over a wide bandwidth provides 50% reflection and transmission. We can also provide coatings with different R/T ratios at a specific angle of incidence.
	Polarization Beamsplitter	High reflection for s-polarized and antireflection for p-polarized for laser application.
High Reflection	Dielectric High Reflective Coatings	Provide high reflectance over a broad bandwidth, and is ideal for a tunable laser or in white light applications.
	Dichroic Mirrors	These coatings can separate the laser fundamental and the pump wavelength, or the fundamental and the second harmonic. They are specifically applied to laser mirrors.
Filter	Long wave pass (LWP)	The coating allows the long wavelength pass and cut off (reflection) the short wavelength.
	Short wave pass (SWP)	The coating allows the short wavelength pass and cut off (reflection) the long wavelength.
	Bandpass	The coating allows the specified wavelength bandwidth pass and cut off the other wavelength.
Metallic mirror	Aluminum	UV enhanced Aluminum with MgF2 or protective Al+SiO2.
	Silver	Protective Ag+SiO2 or bare silver coating.
	Gold	Bare gold (Au) coating
Others	Hydrophobic coating	With a special coating layer on the top of AR coating, the coating will be water and dust resistant without affecting the AR coating reflection and transmission.
	Ni-Cr coating	
	ITO coating	