



**Technical Data Sheet**

**Precision High LIDT MPC Coatings**

MPC / Broadband Femtosecond Multi-Pass Cell Laser Mirrors

**Short Description**

Multipass cells (MPCs) are used as nonlinear tools to perform spectral broadening and temporal manipulation of laser pulses, while maintaining a good spatial quality and spatio-spectral homogeneity. These MPCs mirrors are fabricated with NANEO's proprietary precision coating technology on IBS (Ion Beam Sputtering) coating machines. NANEO achieves unique layer thickness precision. IBS provides the most dense, low loss, stable and enduring optical coatings among the optical coating technologies.

**Design Specifications**

Wavelength: range from 500 up to 2000nm  
 Reflection: typically > 99,99%  
 Angle of incidence: 0 to 10°  
 LIDT: up to >1,0J/cm<sup>2</sup> depending on coating design  
 GDD: 0 +/-50fs<sup>2</sup>  
 Substrates: dia 2 inch to 4 inch  
 flat or curved substrates

**Example Design PR0430**

Type: MPC-965-1105-|50|-0°-R>99,995  
 Reflection: R > 99,995% @ 965 - 1105nm  
 AOI: 0°  
 LIDT: 1,185J/cm<sup>2</sup> (1030nm, 200fs, 1-on1\*)  
 GDD: +/- 50fs<sup>2</sup> @ 965 - 1105nm  
 Substrates: dia 25,4x6,35mm<sup>2</sup> pl/pl

\* apply safety margin for safe operation depending on pulse duration and pulse repetition rate

