



**Technical  
Data Sheet**

**Dispersion Controlled Coatings**  
 GVD / Group Velocity Dispersion Mirror  
 HDM / High Dispersion Mirror  
 BSDC / Beam Splitter Dispersion Controlled

**Short  
Description**

Our Dispersion Controlled Coatings comprise three groups: Group Velocity Dispersion Mirrors (GVD), High Dispersion Mirrors (HDM) and Beam Splitter Dispersion Controlled Mirrors (BSDC). Dispersion controlled coatings are mirrors to compensate positive Group Velocity Dispersion (GVD) of all materials. GVD's up to several thousand fs<sup>2</sup> are possible. We can achieve these high values within tight tolerances.

The Dispersion Controlled 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 400 up to 1500nm  
 Reflection: > 99,9%  
 GVD: up to -5000fs<sup>2</sup>  
 Angle of incidence: certain angle 0 - 30°

Substrates: customized substrates

**Example  
Design**

Type: HDM-1025-1035-3000-0°-R>99,9  
 Reflection: R>99,9% @ 1025-1035nm  
 GVD: -3000fs<sup>2</sup>  
 AOI: 0°  
 customized design

