Glass dome

A dome is composed of two parallel surfaces, which are curved. Compared with any other optical components, it has no optical effect in the optical design.

Domes can be used in pods and missiles. They are designed to protect electronic detectors and sensors from moving particles, water and corrosives while extending their viewing angles. Also they are ideal for underwater environments and in applications such as camera dome ports and submersible window.

We provide hemisphere domes and hyperhemisphere domes. They are produced by polishing and can be manufactured to specification from a variety of materials. Optical glass, fused silica, sapphire, IR crystals, as well as transparent ceramic are commonly used.

N-BK7 or equivalent, offers a tough, cost effective solution for visible range applications while Fused Silica is ideal for wavelengths below 400nm.

Key features:
- With different shape, hemisphere, hyper hemisphere, cutting …
- A variety of materials available
- From small to big size, diameter up to 400mm

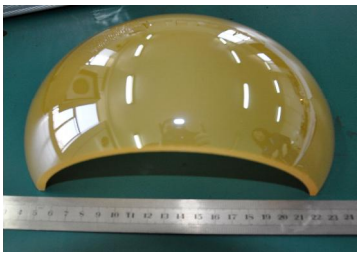
Capability

Material:	N-BK7, Fused silica
Diameter:	Φ10 - Φ400mm
Diameter tolerance:	± 0.04 - ± 0.2mm
Thickness tolerance:	± 0.02mm - ± 0.15mm
Radius:	5mm – 200mm
Surface quality:	40/20 - 80/50
Surface accuracy:	λ/2 - 4λ
Irregularity:	0.1 - 1.0 λ
Centration:	30 arc seconds – 5 arc minutes
Coating:	With or without AR coating
Transmission:	> 95%
Reflectivity:	< 3% max

Other materials available upon request

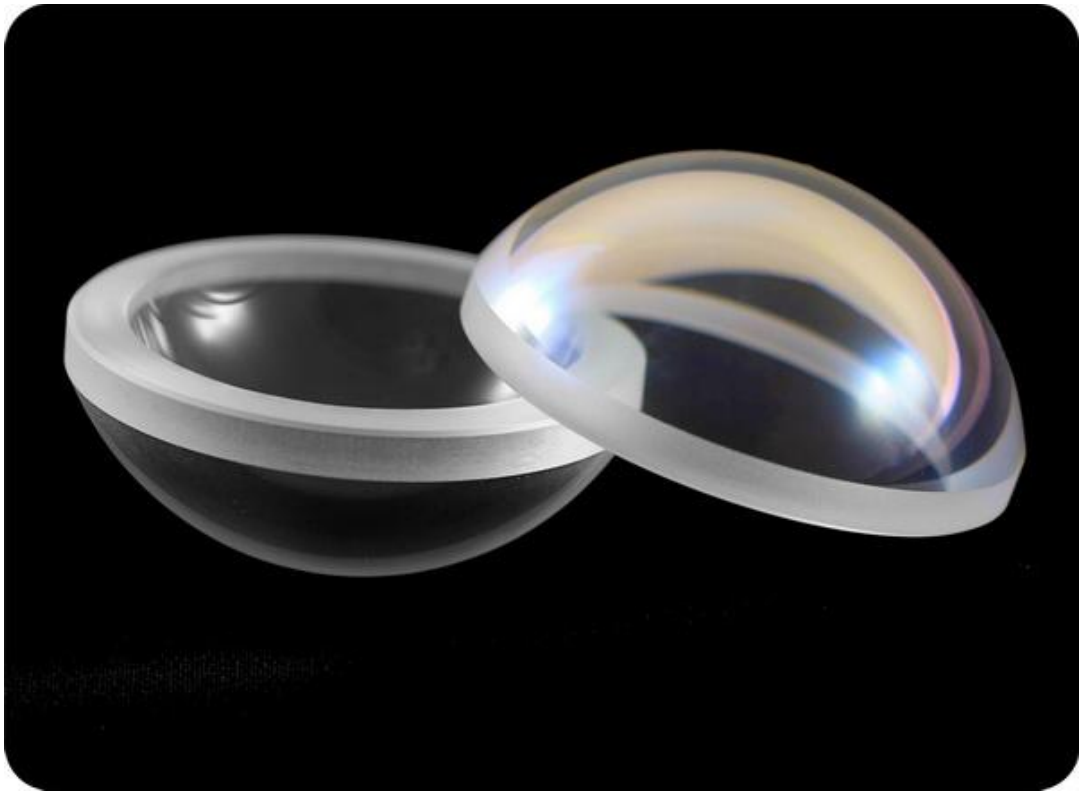
Sapphire dome

Ge dome

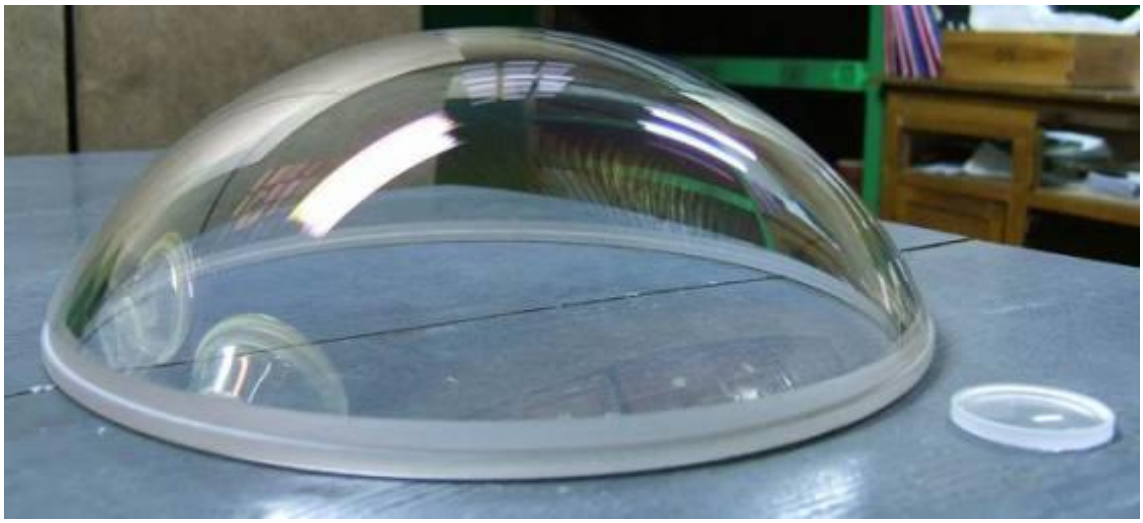


HP ZnS dome

BK7 / Fused Silica glass dome



Dome with step



Step, sloping surface or non-circular shape is available upon request.