



TOQUARTZ®  
Tech Specifications

# Quartz Glass Dome Product Catalog

Integrated Engineering & Agile Production  
**for Demanded Specifications**



# TOQUARTZ® QUARTZ GLASS DOME

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Quartz Glass Dome with fast delivery and consistent quality.



## Product Overview

**TOQUARTZ® High-purity fused silica domes designed for superior UV transmission and thermal stability in demanding industrial applications. Our quartz glass domes provide exceptional performance for solar concentrators, photocatalytic reactors, and UV disinfection systems.**

# TOQUARTZ® QUARTZ GLASS DOME



## Key Features

- Superior UV Transmission: 90-95%+ (UV-A), 80-95% (UV-B), 80-90% (UV-C)
- Exceptional Thermal Stability: Operating temperatures up to 1200°C
- High Purity Material:  $\geq 99.995\%$  SiO<sub>2</sub> content
- Precision Manufacturing: Dimensional tolerances down to  $\pm 0.05\text{mm}$
- Optional TiO<sub>2</sub> Coating: For enhanced photocatalytic applications
- Custom Dimensions: Available in diameters from 30mm to 300mm



# TOQUARTZ® QUARTZ GLASS DOME



## Applications

- **UV Disinfection Systems:** Maximum germicidal efficiency through superior UV-C transmission
- **Solar Concentrator Systems:** Heat-resistant optical components for concentrated solar power
- **Photocatalytic Reactors:**  $\text{TiO}_2$ -coated options for wastewater treatment and air purification
- **Optical Instruments:** Precision components for UV-dependent scientific equipment
- **Industrial Viewports:** Heat-resistant observation windows for high-temperature processes



# TECHNICAL SPECIFICATIONS

Parameter	Specification	Notes
Material	High-purity fused silica (SiO <sub>2</sub> ≥99.995%)	UV-grade or optical grade available
Diameter Range	30mm - 300mm	Common sizes: 160mm, 290mm
Wall Thickness	1mm - 30mm	Optimized for thermal stability
Dimensional Tolerance	±0.1mm standard (±0.05mm available)	Precision grade for optical applications
Surface Quality	60-40 scratch-dig standard	Higher grades available on request
Temperature Resistance	Up to 1200°C	Exceeds solar concentrator requirements (450°C)
Optional Coatings	TiO <sub>2</sub> photocatalytic coating, AR coating	Inner or outer surface available



# CUSTOMIZATION OPTIONS

**Our engineering team can customize quartz glass domes to meet your specific requirements:**

- Custom Dimensions: Precision manufacturing to your exact specifications
- Surface Treatments:  $\text{TiO}_2$  photocatalytic coatings, anti-reflective treatments
- Material Grades: UV-grade, optical-grade, or standard fused silica
- Design Assistance: Technical guidance and drawing assistance



# ABOUT TOQUARTZ®

**TOQUARTZ® is a specialized manufacturer of high-quality quartz glass products for industrial, laboratory, and optical applications. Our factory-direct approach eliminates intermediaries, providing cost-effective solutions with responsive technical support. We welcome small batch orders and offer 24-hour shipping for standard items.**

## Contact Information

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**TOQUARTZ® - Precision Quartz Solutions for Industry and Research**

*For technical specifications, custom requirements, or pricing information, please contact our sales team.*