



# TOQUARTZ

## Product Catalog

# TOQUARTZ®

## Transparent Quartz Flow Cell with M5 Threaded Connectors

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





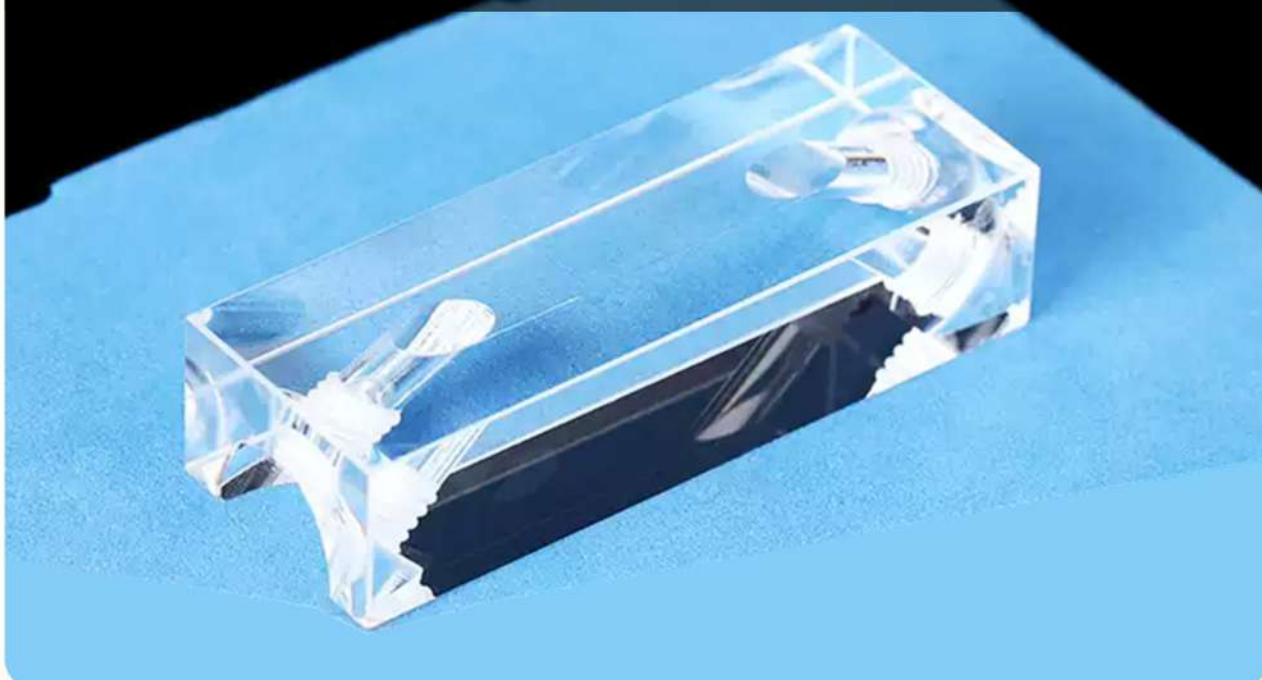
# TOQUARTZ®

## TRANSPARENT QUARTZ FLOW CELL WITH M5 THREADED CONNECTORS

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® Transparent Quartz Flow Cell with M5 Threaded Connectors with fast delivery and consistent quality.

### Product Overview

**TOQUARTZ® Transparent Quartz Flow Cell with M5 Threaded Connectors** is manufactured from high-purity fused quartz for spectroscopy, chromatography, and continuous flow analysis. It provides broad UV–VIS–NIR transmission (190–2500 nm), high resistance to acids and alkalis, and thermal stability above 1000 °C.





# TOQUARTZ®

## TRANSPARENT QUARTZ FLOW CELL WITH M5 THREADED CONNECTORS



### Key Features

- Transparent fused quartz walls minimize stray light.
- Secure M5 threaded connectors for leak-free integration.
- Precision-polished flow channel ensures bubble-free performance.
- Thermal and chemical durability for industrial and laboratory use.



# TOQUARTZ®

## TRANSPARENT QUARTZ FLOW CELL WITH M5 THREADED CONNECTORS



### Applications

- UV-Vis Spectroscopy
- Fluorescence Detection
- Continuous Flow Analysis
- Biopharmaceutical Monitoring
- Environmental Testing





# TECHNICAL SPECIFICATIONS

## Physical Properties

- Flexural strength:  $\geq 350$  MPa (measured per DIN EN ISO 178)
- Density:  $2.2 \text{ g/cm}^3$
- Thermal expansion coefficient:  $\leq 0.55 \times 10^{-6} / \text{K}$  (20–1000 °C range)
- Thermal conductivity:  $1.4 \text{ W/m}\cdot\text{K}$  at 25 °C
- Maximum continuous service temperature: 1000–1100 °C
- Connector type: Precision M5 screw-threaded ports

## Chemical Properties

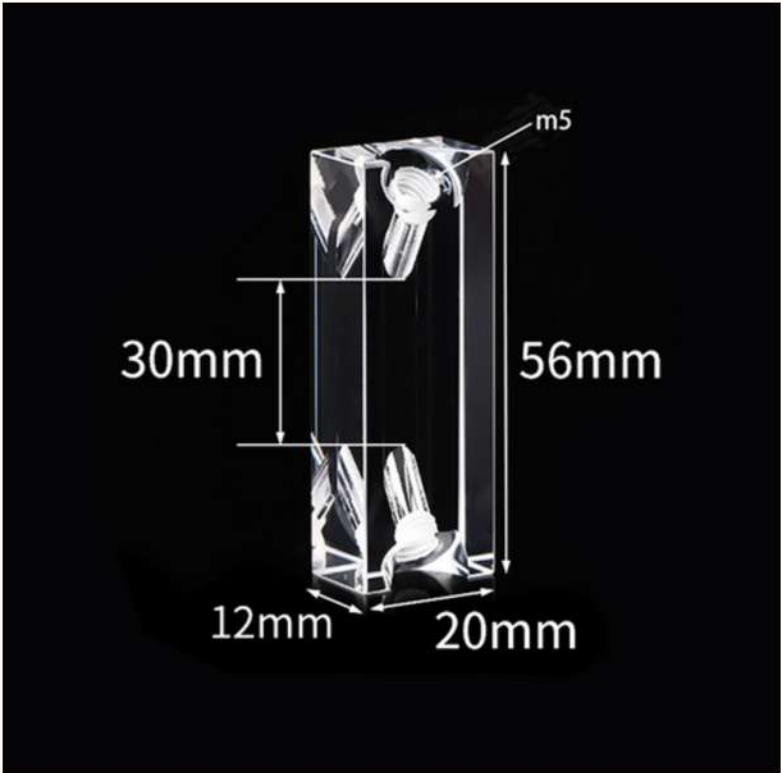
- Purity:  $\geq 99.98\% \text{ SiO}_2$
- Resistance to acids: Stable against most mineral acids (except HF)
- Resistance to alkalis: Excellent stability in dilute and concentrated alkalis
- Resistance to halogens: High tolerance against chlorine, fluorine gas environments
- Corrosion behavior: Negligible weight loss under prolonged immersion in HCl/H<sub>2</sub>SO<sub>4</sub>

## Optical Properties

- Transmission range: 190–2500 nm (UV–VIS–NIR)
- Transmittance deviation:  $\leq 0.3\%$  across 200–800 nm
- Refractive index (nD at 589 nm): 1.458
- Bubble and striae class: Free from visible inclusions under ISO 10110 inspection
- Optical homogeneity: Verified with  $\leq 5 \text{ nm}$  wavefront distortion across path length



# SIZE CHART



0.2mm Path Length Transparent Quartz Flow Cell with M5 Threaded Connectors

Model	Description	PathLength	Wave Length	Outline Dimension
AT-BSM-8042	0.2mm Path Length Transparent Quartz Flow Cell with M5 Threaded Connectors	0.2mm	200-2500nm	56x12x20mm





## CUSTOM ENGINEERING SERVICES

**Customization Services** Our engineering team provides comprehensive customization options to meet your specific requirements:

- **Path Length Adjustments:** Custom optical path lengths from micro-volume ( $\leq 0.2$  mm) to extended channels.
- **Connector Modifications:** M5 thread depth, orientation, or replacement with alternative thread standards (e.g., M6, M10).
- **Channel Geometry:** Tailored flow channel width, depth, and shape to optimize sample throughput and minimize dead volume.
- **Wall Thickness Control:** Precise machining of quartz wall thickness for improved optical clarity and structural strength.
- **Surface Finishing:** Optional optical polishing or anti-reflective coatings to reduce scattering and improve transmittance.



# QUALITY ASSURANCE

Each TOQUARTZ Quartz Cuvette undergoes rigorous quality control testing:

- **Dimensional Verification:** Precision measurement of all critical dimensions
- **Optical Transmission Testing:** Verification of spectral transmission properties
- **Surface Quality Inspection:** Microscopic examination of polished surfaces
- **Paired Performance Testing:** Validation of optical consistency

## Contact Information

Email: [info@toquartz.com](mailto:info@toquartz.com)

Website: [www.toquartz.com](http://www.toquartz.com)

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

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