



TOQUARTZ

Product Catalog

TOQUARTZ®

Custom-Slot Quartz

UV Cuvette

Integrated Engineering & Agile Production
for Demanded Specifications





TOQUARTZ® CUSTOM-SLOT QUARTZ UV CUVETTE

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® Custom-Slot Quartz UV Cuvette with fast delivery and consistent quality.



Product Overview

TOQUARTZ® Custom-Slot Quartz UV Cuvette is a precision-engineered optical component designed for high-accuracy UV-Vis spectrophotometry and fluorescence analysis. Manufactured from high-purity fused quartz ($\geq 99.98\% \text{ SiO}_2$), it offers exceptional UV transmittance from 200nm to 2500nm, with no absorption peaks in the critical UV range. The custom slot design allows seamless integration with automated sampling systems, dual-path detection, or microfluidic applications.



TOQUARTZ® CUSTOM-SLOT QUARTZ UV CUVETTE



Key Features

- Superior Optical Properties: Exceptional transmittance (>80% at 200nm) across the 200-2500nm range
- High-Purity Material: Manufactured from 99.98% SiO₂ fused quartz
- Precision Engineering: Tight dimensional tolerances ($\pm 0.1\text{mm}$)
- Chemical Resistance: Stable against most acids, bases, and organic solvents
- Thermal Stability: Maintains dimensional integrity up to 1100°C
- Custom Slot Design: Engineered to exact specifications for specialized analytical applications

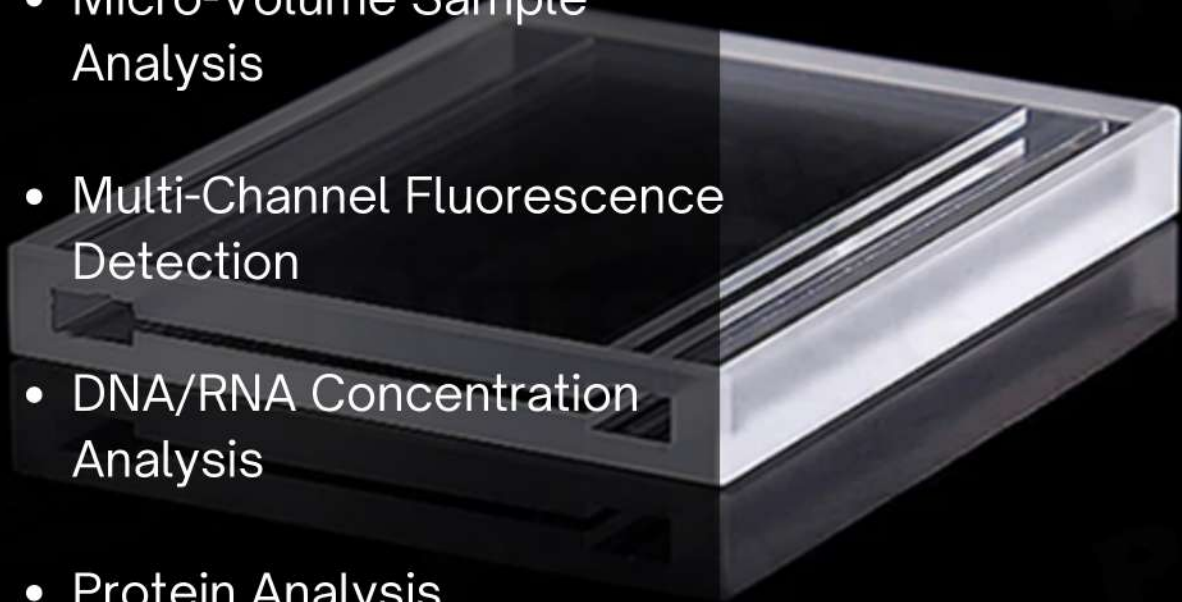


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Applications

- Automated Spectrophotometer Systems
- Micro-Volume Sample Analysis
- Multi-Channel Fluorescence Detection
- DNA/RNA Concentration Analysis
- Protein Analysis
- Environmental Monitoring
- Pharmaceutical Quality Control





TECHNICAL SPECIFICATIONS

Physical Properties:

- Material: High-purity fused quartz
- Density: 2.2 g/cm³
- Thermal Expansion Coefficient: $5.5 \times 10^{-7} / ^\circ\text{C}$
- Maximum Operating Temperature: 1100°C
- Hardness: 5.5-6.5 Mohs

Chemical Properties:

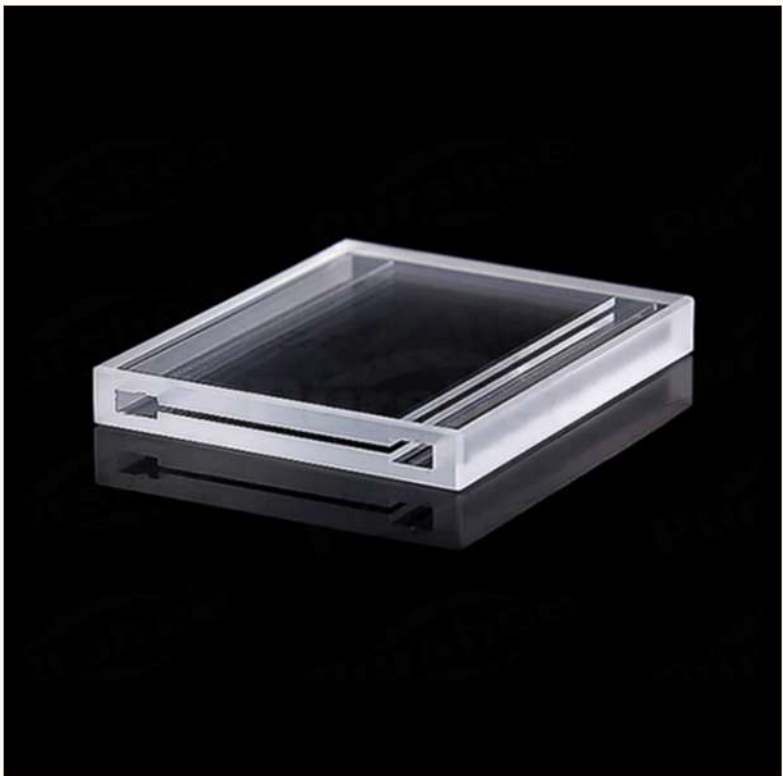
- Purity: $\geq 99.98\%$ SiO₂
- Chemical Resistance: Excellent resistance to acids, bases, and organic solvents
- Water Absorption: $< 0.01\%$
- Solubility in Water: Negligible

Optical Properties:

- Refractive Index: 1.458 (at 546nm)
- UV Cutoff: $< 180\text{nm}$
- Transmittance at 200nm: $> 80\%$
- Transmittance at 250-2500nm: $> 90\%$
- Surface Quality: Fine optical polish, free of bubbles and scratches



SIZE CHART



Custom-Slot Quartz UV Cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-030	Custom-Slot Quartz UV Cuvette	200nm-2500nm	2mm/0.5 mm	/	>80% (Paired Testing)	35x5x42mm



CUSTOMIZATION OPTIONS

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

- Custom Slot Dimensions: Tailor slot width, depth, and geometry
- Specialized Path Lengths: From 0.1mm to 100mm with tight tolerances
- Multiple Optical Windows: 2, 3, 4, or 6 optical windows
- Flow-Through Adaptations: Custom inlet/outlet ports
- Special Surface Treatments: Black-masked walls or specialized coatings
- Integration Features: Custom mounting features



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

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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.