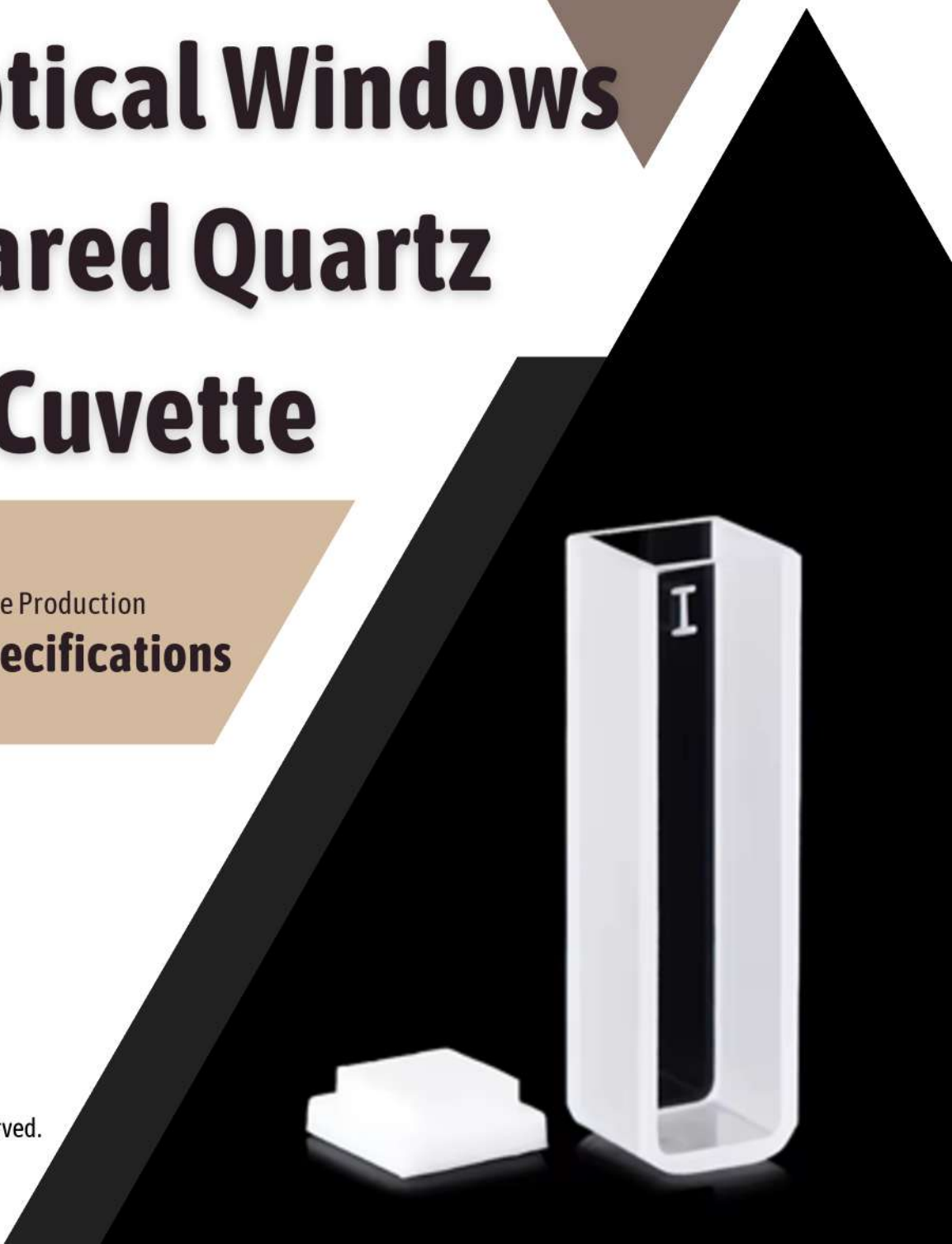
TOQUARTZ

TOQUARTZ
Product Catalog

TOQUARTZ®
Two Optical Windows Infrared Quartz Cuvette

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® TWO OPTICAL WINDOWS INFRARED QUARTZ CUVETTE

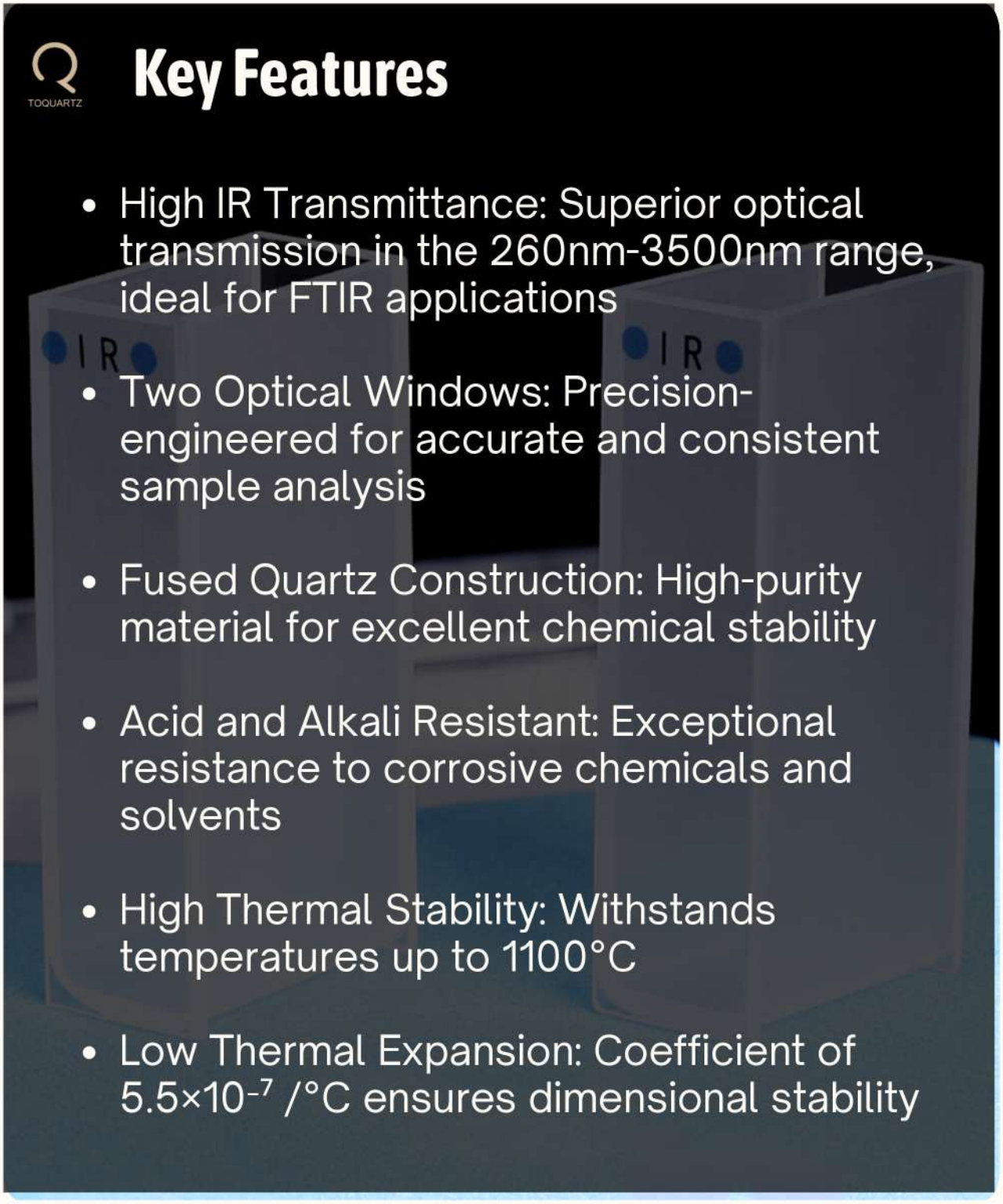
TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom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

Product Overview

TOQUARTZ® infrared quartz cuvettes are precision-crafted optical cells made from high-purity fused quartz (⩾99.98% SiO_2, up to 99.995%). These specialized cells feature two optical windows designed for superior infrared transmission across the 260nm-3500nm spectral range. With customizable path lengths from 1mm to 50mm, these cuvettes provide reliable solutions for laboratories and manufacturers requiring precise infrared spectroscopic analysis.

TOQUARTZ® TWO OPTICAL WINDOWS INFRARED QUARTZ CUVETTE

Key Features



- High IR Transmittance: Superior optical transmission in the 260nm-3500nm range, ideal for FTIR applications
- Two Optical Windows: Precision-engineered for accurate and consistent sample analysis
- Fused Quartz Construction: High-purity material for excellent chemical stability
- Acid and Alkali Resistant: Exceptional resistance to corrosive chemicals and solvents
- High Thermal Stability: Withstands temperatures up to 1100°C
- Low Thermal Expansion: Coefficient of 5.5×10^{-7} /°C ensures dimensional stability

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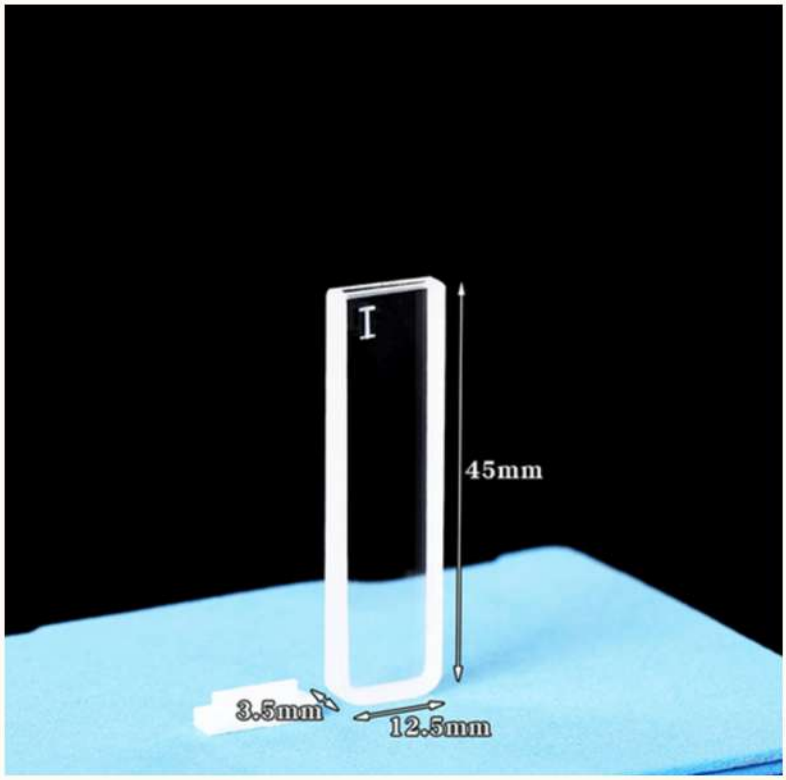
TECHNICAL SPECIFICATIONS

Property	Specification	Notes
Physical Properties		
Material	High-purity fused quartz	≥99.98% SiO_2 (up to 99.995%)
Path Length Range	1mm - 50mm	Precision tolerance ±0.1mm
Wall Thickness	1.25mm typical	Custom thicknesses available
Density	2.2 g/cm³	At 25°C
Surface Finish	Optical grade polish	Bubble and inclusion free optical windows
Chemical Properties		
Chemical Resistance	Excellent resistance to acids, alkalis, and organic solvents	Except for HF and hot phosphoric acid
Water Absorption	Negligible	Non-hygroscopic
Gas Permeability	Impermeable to gases	Suitable for vacuum applications
Optical Properties		
Transmission Range	260nm - 3500nm	Covers UV, visible, and IR regions
IR Transmittance	>80%	Paired testing throughout operational range
Refractive Index	1.46 at 589.3nm	At 25°C
Thermal Expansion Coefficient	5.5×10^{-7} /°C	20-300°C range
Maximum Operating Temperature	1100°C	Continuous use

SIZE CHART



350μl IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2010	350μl IR quartz cuvette	300nm-3500nm	1mm	350μl	>80% (Paired Testing)	12.5x3.5x45 mm

SIZE CHART

700μl IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2011	700μl IR quartz cuvette	300nm-3500nm	2mm	700μl	>80% (Paired Testing)	12.5x4.5x45 mm

SIZE CHART

700μl IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2011-1	700μl IR quartz cuvette	300nm-3500nm	5mm	700μl	>80% (Paired Testing)	12.5x4.5x45 mm

SIZE CHART

1.75ml IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2012	1.75ml IR quartz cuvette	300nm-3500nm	5mm	1.75ml	>80% (Paired Testing)	12.5x7.5x45 mm

SIZE CHART

3.5ml IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2002	3.5ml IR quartz cuvette	260nm-3500nm	10mm	3.5ml	>80% (Paired Testing)	12.5x12.5x45mm

SIZE CHART

7ml IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2009	7ml IR quartz cuvette	300nm-3500nm	20mm	7ml	>80% (Paired Testing)	12.5x22.5x45mm

SIZE CHART

10.5ml IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2006	10.5ml IR quartz cuvette	300nm-3500nm	30mm	10.5ml	>80% (Paired Testing)	12.5x32.5x45mm

SIZE CHART

14ml IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2007	14ml IR quartz cuvette	260nm-3500nm	40mm	14ml	>80% (Paired Testing)	12.5x42.5x45mm

SIZE CHART

18ml IR quartz cuvette

Model	Description	Wavelength	Path Length	Volume	Transmittance	Outline Dimension
AT-BSM-2007-1	18ml IR quartz cuvette	260nm-3500nm	50mm	18ml	>80% (Paired Testing)	12.5x52.5x45mm

CUSTOMIZATION OPTIONS

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

- Custom path lengths from 0.5mm to 100mm
- Special heights for unique instrument compatibility
- Modified wall thickness for thermal applications
- Airtight PTFE stoppers
- Screw-cap systems for secure sealing
- Flow-through designs with inlet/outlet ports
- Anti-reflection coatings for improved transmission
- Hydrophobic surface treatments
- Special polishing for enhanced optical clarity

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.