TOQUARTZ

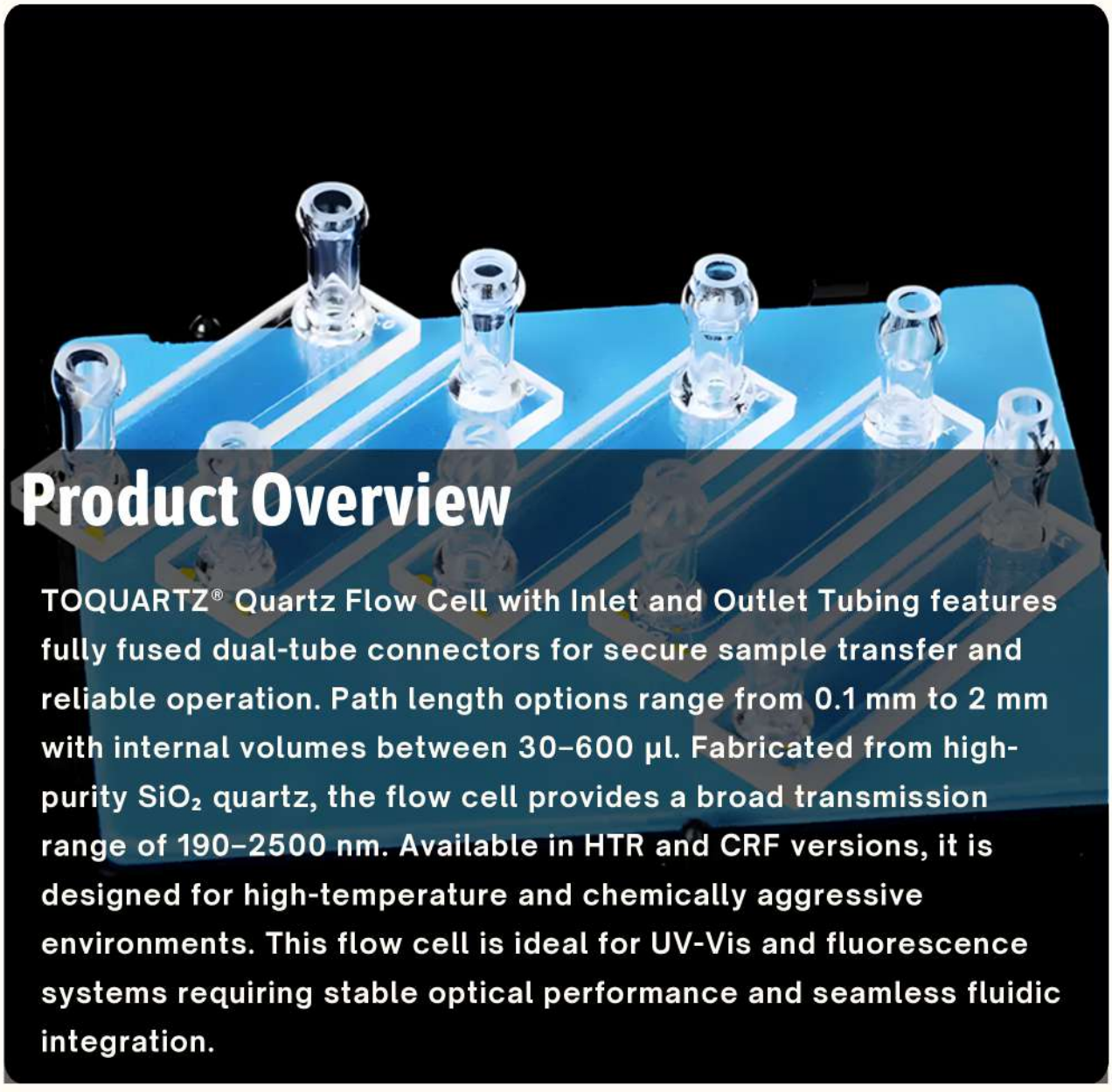
TOQUARTZ
Product Catalog

TOQUARTZ®
Quartz Flow Cell with Inlet and Outlet Tubing

Integrated Engineering & Agile Production
for Demanded Specifications

TOQUARTZ®
QUARTZ FLOW CELL WITH INLET AND OUTLET TUBING

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 Flow Cell with Inlet and Outlet Tubingwith fast delivery and consistent quality.



Product Overview

TOQUARTZ® Quartz Flow Cell with Inlet and Outlet Tubing features fully fused dual-tube connectors for secure sample transfer and reliable operation. Path length options range from 0.1 mm to 2 mm with internal volumes between 30–600 µl. Fabricated from high-purity SiO_2 quartz, the flow cell provides a broad transmission range of 190–2500 nm. Available in HTR and CRF versions, it is designed for high-temperature and chemically aggressive environments. This flow cell is ideal for UV-Vis and fluorescence systems requiring stable optical performance and seamless fluidic integration.

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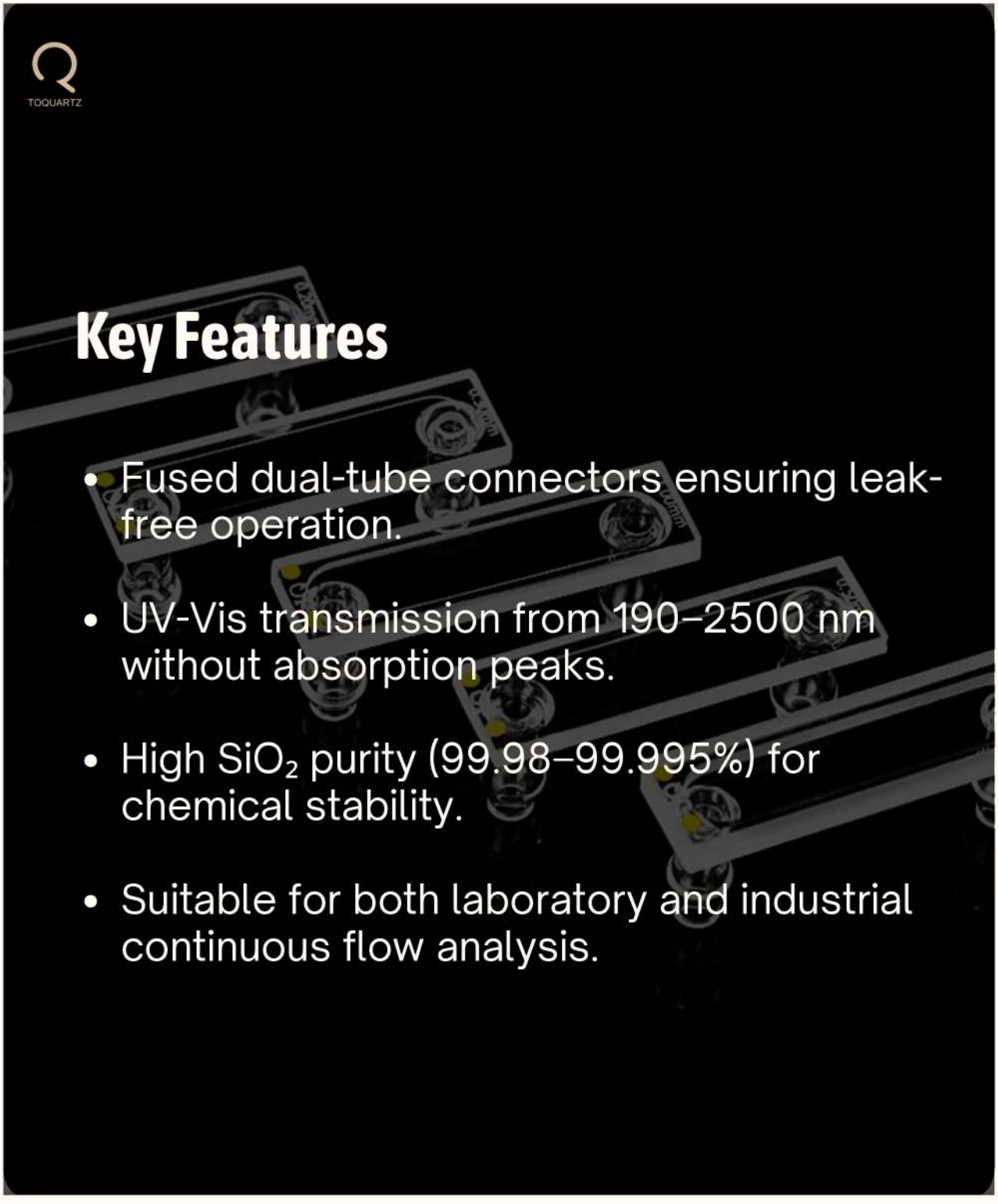

Key Features

- Fused dual-tube connectors ensuring leak-free operation.
- UV-Vis transmission from 190–2500 nm without absorption peaks.
- High SiO_2 purity (99.98–99.995%) for chemical stability.
- Suitable for both laboratory and industrial continuous flow analysis.

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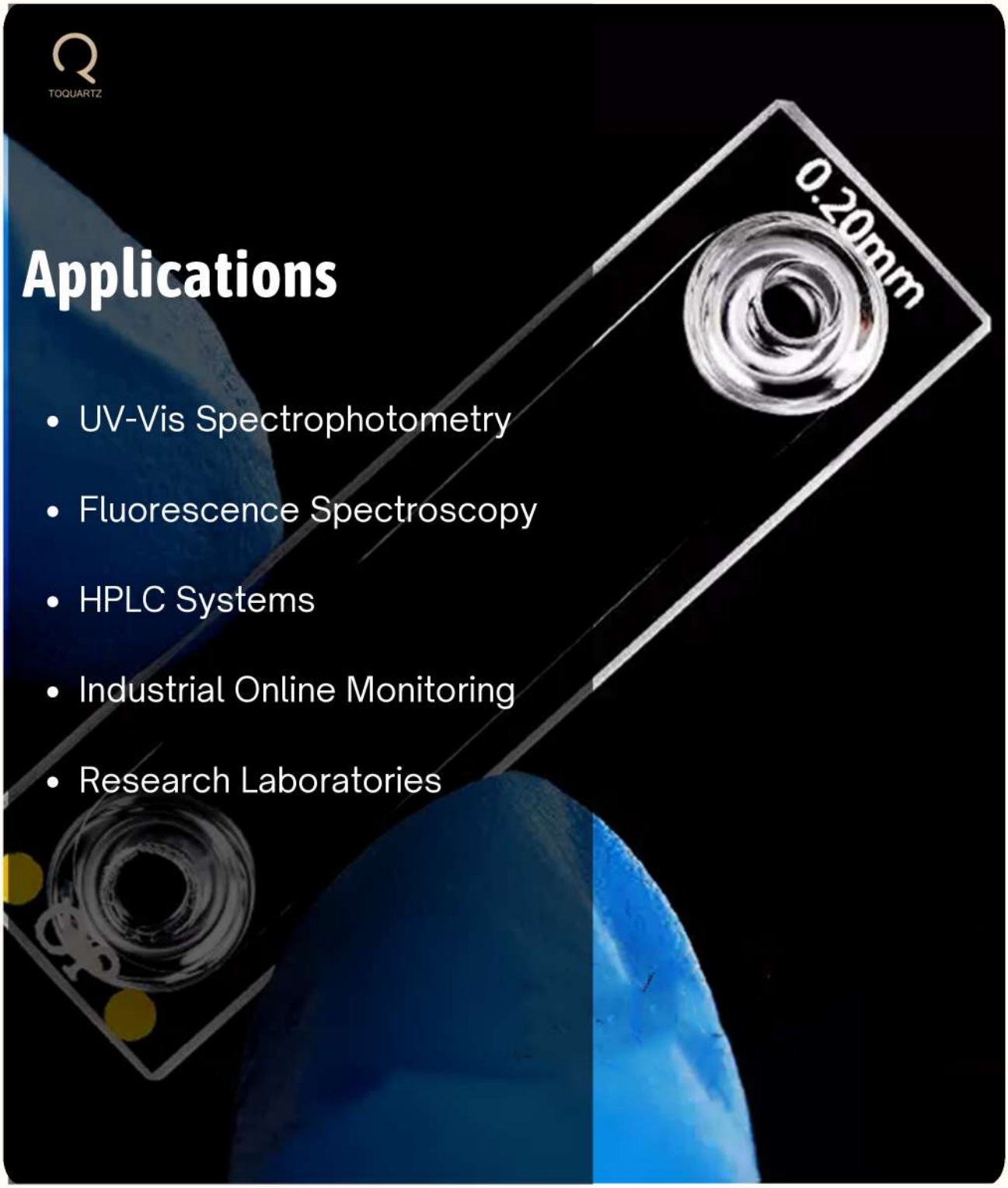

TECHNICAL SPECIFICATIONS

Physical Properties

- Density: 2.2 g/cm³
- Thermal conductivity: 120–160 W/m·K
- Thermal expansion: ≤0.55×10^{-6}/K
- Max service temperature: ≥1100 °C
- Softening point: ~1665 °C

Chemical Properties

- SiO_2 purity: 99.98–99.995%
- Resistant to acids, bases, and molten salts
- Stable against fluorinated gases
- Non-reactive with water vapor
- Corrosion-proof fused quartz body

Optical Properties

- Transmission range: 190–2500 nm
- Absorbance deviation: ≤0.3%
- Refractive index: 1.46 at 589 nm
- Optical homogeneity: >99%
- Consistent UV-Vis and fluorescence performance

Mechanical Properties

- Fracture strength: ≥350 MPa
- Elastic modulus: 72 GPa
- Poisson's ratio: 0.17
- Hardness: 570 KHN
- Wear resistance under high flow conditions

SIZE CHART

150μl Quartz Flow Cell with Inlet and Outlet Tubing

Model	Description	PathLength	Volume	Outline Dimension
AT-BSM-8017	150μl Quartz Flow Cell with Inlet and Outlet Tubing	0.5mm	150μl	12.5*3*45mm

SIZE CHART

30μl Quartz Flow Cell with Inlet and Outlet Tubing

Model	Description	PathLength	Volume	Outline Dimension
AT-BSM-8017-1	30μl Quartz Flow Cell with Inlet and Outlet Tubing	0.1mm	30μl	12.5*2.6*45mm

SIZE CHART

60μl Quartz Flow Cell with Inlet and Outlet Tubing

Model	Description	PathLength	Volume	Outline Dimension
AT-BSM-8017-2	60μl Quartz Flow Cell with Inlet and Outlet Tubing	0.2mm	60μl	12.5*2.7*45mm

SIZE CHART

90μl Quartz Flow Cell with Inlet and Outlet Tubing

Model	Description	PathLength	Volume	Outline Dimension
AT-BSM-8017-3	90μl Quartz Flow Cell with Inlet and Outlet Tubing	0.3mm	90μl	12.5*2.8*45mm

SIZE CHART

300μl Quartz Flow Cell with Inlet and Outlet Tubing

Model	Description	PathLength	Volume	Outline Dimension
AT-BSM-8017-4	300μl Quartz Flow Cell with Inlet and Outlet Tubing	1mm	300μl	12.5*3.5*45mm

SIZE CHART

600μl Quartz Flow Cell with Inlet and Outlet Tubing

Model	Description	PathLength	Volume	Outline Dimension
AT-BSM-8017-5	600μl Quartz Flow Cell with Inlet and Outlet Tubing	2mm	600μl	12.5*4.5*45mm

CUSTOM ENGINEERING SERVICES

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

- Path length adjustment based on analytical requirements
- Connector design modifications for tubing compatibility
- Optical surface treatment for improved clarity
- Engineering support for drawing validation and design feasibility
- Customer-specific prototypes for system integration

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.