



TOQUARTZ
Tech Specifications

TOQUARTZ®
Square Quartz Tube
Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® SQUARE QUARTZ TUBE

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® Square Quartz Tubes with fast delivery and consistent quality.



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Product Overview

TOQUARTZ® square quartz tubes are manufactured from high-purity fused silica, offering excellent thermal stability, UV transmission, and chemical resistance. These square quartz glass tubes support a wide range of industrial and scientific applications requiring precision materials.

TOQUARTZ® SQUARE QUARTZ TUBE



Key Features

- **High Temperature Resistance:** Withstands continuous operation at 1100°C and short-term exposure up to 1350°C
- **Superior Optical Properties:** >93% visible light transmission and >80% UV transmission
- **Chemical Resistance:** Inert to most acids, bases, and solvents (except HF)
- **Customization Available:** Custom sizes, wall thicknesses, and end finishing options

TOQUARTZ® SQUARE QUARTZ TUBE



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Applications

- Laboratory equipment and analytical instruments
- UV sterilization and disinfection systems
- Industrial heating and thermal processing
- Semiconductor and solar manufacturing
- Optical instruments and light transmission
- Chemical processing and reactor components



TECHNICAL SPECIFICATIONS

Material Properties

Property	Value
Density	2.2 g/cm ³
Flexure Strength	48 MPa
Elastic Modulus	72 GPa
Poisson's Ratio	0.14-0.17
Compressive Strength	1100 MPa
Bending Strength	67 MPa
Moh's Hardness	5.5-6.5

Thermal & Optical Properties

Property	Value
Maximum Working Temperature (long-term)	1100°C
Maximum Working Temperature (short-term)	1350°C
Thermal Conductivity	1.4 W/m·K
Refractive Index	1.4585
Thermal Expansion Coefficient	$5.5 \times 10^{-7} / ^\circ\text{C}$
Specific Resistance	$7 \times 10^7 \Omega \cdot \text{cm}$
Transmission (280-780nm)	≥93% (1mm thickness)



SIZE CHART

Model	Side Length 1 (mm)	Side Length 2 (mm)	Wall Thickness (mm)	Length (mm)	Purity (%)
AT-QTZ-FG001	20	20	3-6	≤1000	99-99.98%
AT-QTZ-FG002	30	30	3-6	≤1000	99-99.98%
AT-QTZ-FG003	40	40	3-6	≤1000	99-99.98%
AT-QTZ-FG004	50	50	3-6	≤1000	99-99.98%
AT-QTZ-FG005	75	65	3-6	≤1000	99-99.98%
AT-QTZ-FG006	80	70	3-6	≤1000	99-99.98%
AT-QTZ-FG007	100	100	3-10	≤1000	99-99.98%
AT-QTZ-FG008	200	200	3-10	≤1000	99-99.98%



SIZE CHART

Model	Side Length 1 (mm)	Side Length 2 (mm)	Wall Thickness (mm)	Length (mm)	Purity (%)
AT-QTZ-FG009	300	300	3-10	≤1000	99-99.98%
AT-QTZ-FG010	400	400	3-10	≤1000	99-99.98%
AT-QTZ-FG011	500	500	3-10	≤1000	99-99.98%
AT-QTZ-FG012	600	600	3-10	≤1000	99-99.98%
AT-QTZ-FG013	700	700	7-10	≤1000	99-99.98%
AT-QTZ-FG014	800	800	7-10	≤1000	99-99.98%
AT-QTZ-FG015	900	900	7-10	≤1000	99-99.98%
AT-QTZ-FG016	1000	1000	7-10	≤1000	99-99.98%



CUSTOMIZATION MANUFACTURING

TOQUARTZ offers comprehensive custom manufacturing services:

- Technical drawing assistance
- Material selection consultation
- Prototype development
- Quality inspection and testing

Our engineering team works directly with customers to develop solutions for specific requirements, from prototyping through volume production.



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

Email: info@toquartz.com

Website: www.toquartz.com

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

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