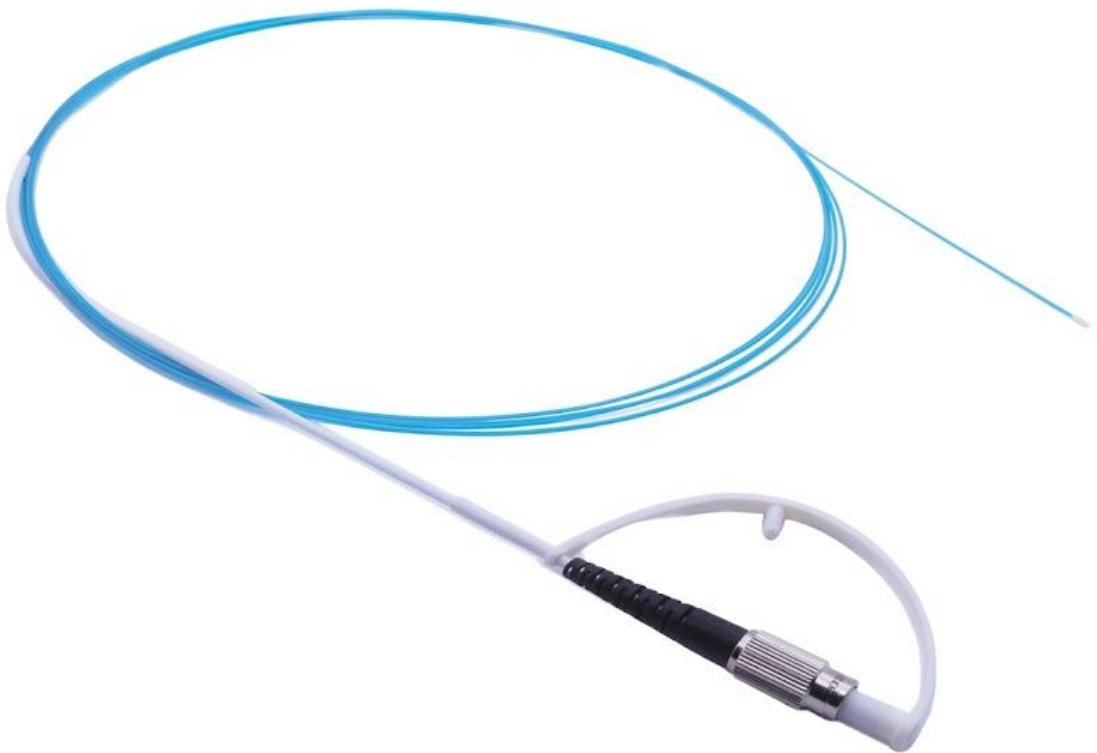




2026 Technical Whitepaper: High-Power Holmium Fiber Optimization for Lithotripsy & HoLEP

Engineering surgical precision through advanced silica purity and SMA905 coupling efficiency.



The Gold Standard in Urology: Why Fiber Integrity Dictates Clinical Outcomes

As clinicians, we rely on the Holmium:YAG laser for its high absorption in water, making it the "Gold Standard" for stone fragmentation and HoLEP.

The Problem: Energy leakage at the distal tip often leads to fiber "burn-back" and reduced surgical efficiency.

Fiber core	Item No.
272um	HS-272/420-3.0
365um	HS-365/550-3.0
550um	HS-550/750-3.0

Application - Kidney Stones

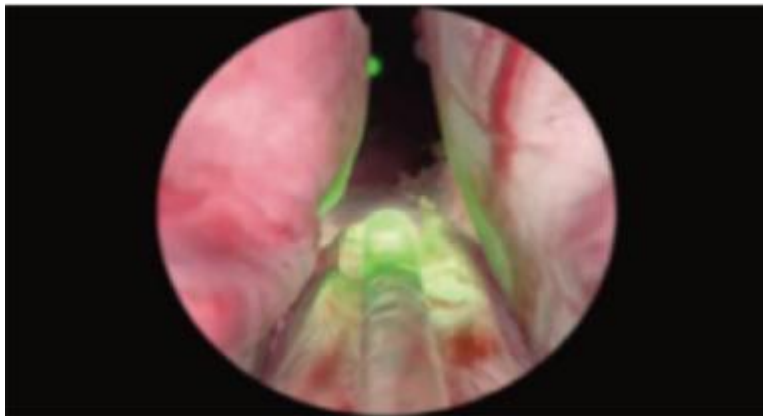
Retrograde Intrarenal Surgery (RIRS) & Nephrolithiasis

Navigating the renal lower pole requires extreme fiber flexibility without sacrificing energy transmission.

Diameter Recommendation: 200 μ m – 272 μ m.

Clinical Goal: Dusting Strategy. Using high frequency and low energy to turn stones into fine dust.

Engineering Note: Our custom ETFE jackets provide the necessary lubricity to slide through flexible ureteroscopes without damaging the working channel.





Customization & Integration

Bespoke Engineering: Tailoring Fibers for Surgical System Integrators

Custom Lengths: 2.5m to 4.0m options.

Connector Branding: Private labeling for OEM partners.

Related Technologies: Explore our synergistic solutions in Radial Fiber Laser technology for broader clinical applications.

Refer to our technical blog for deep dives on Radial Fiber and Hemorrhoid solutions at

<https://new.medfiber.com/holmiumfiber/>



Secure Your Surgical Supply Chain with Medfibers™

**Innovation in laser medicine begins with the reliability
of the delivery system.**

Request a Professional Quote: Professional inquiries only.

No public pricing to maintain supply chain integrity.

Contact Our Engineering Team: info@medfiber.com

Website: <https://new.medfiber.com/>