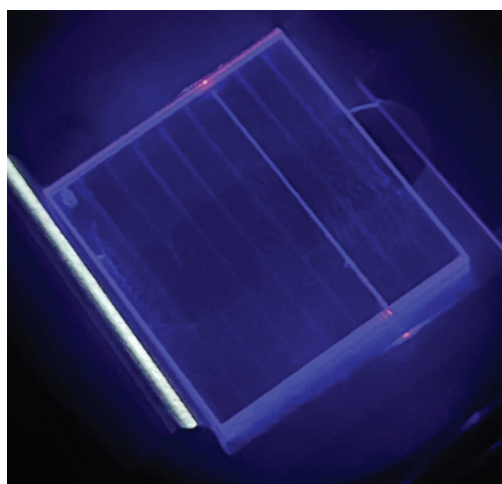


ppKTP WAVEGUIDES

Laser-written ppKTP waveguides are high-efficiency nonlinear devices that enable superior quantum light generation compared to bulk crystals. Their fiber compatibility and enhanced nonlinear interaction make them a cornerstone of modern quantum technologies.



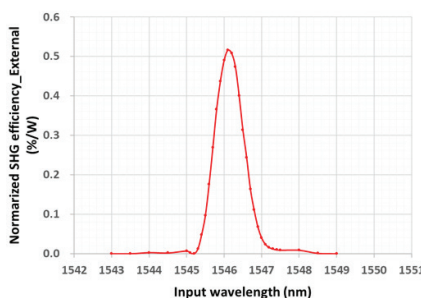
Available WG:

Wavelengths	Type	Length	Fiber Coupled
405 → 810 nm	0, II	5, 10, 20	Contact us
532 → 1064 nm	0, II	5, 10, 20	Contact us
775 → 1550 nm	0, II	5, 10, 20	Yes

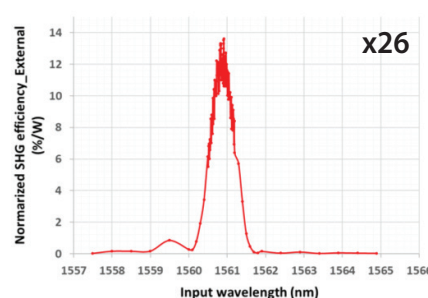
*Custom wavelengths and aperiodic poling upon request.

Advantages Compared to Bulk

- Increased Efficiency of Nonlinear Interactions
- Low-loss Connectivity to Single-mode Fibers via Mode Matching
- Increased Detected Photon Pair Rate



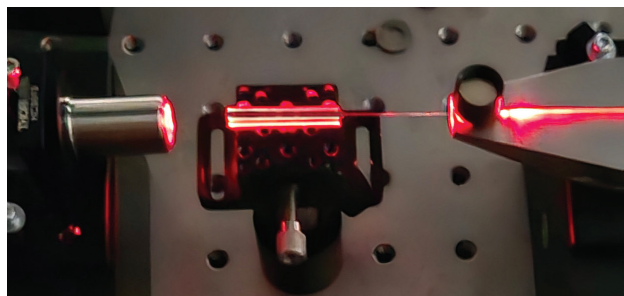
Bulk



Waveguide

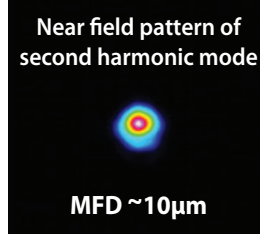
Functionality

- SPDC
- SHG
- Squeezed Light



Applications

- High Resolution Microscopy
- Entangled Photon Generation
- Quantum Computing and Communication
- Quantum Sensing and Imaging



Specifications

Available Wavelengths	405 → 810 nm; 532 → 1064 nm; 775 → 1550 nm; Custom wavelengths and aperiodic polling on request
Mode Field Diameter	~10 µm
Length	Up to 30 mm
Transparency Range	350-4000 nm
Laser Induced Damage Threshold	600MW/cm ² @ 1064 nm, 10 ns pulses
SPDC Type	Type I, Type 0, Type II
Aperture / # of Waveguides	1 mm x 2 mm / 2 per element
AR Coatings	AR, DBAR, HR, Triple band