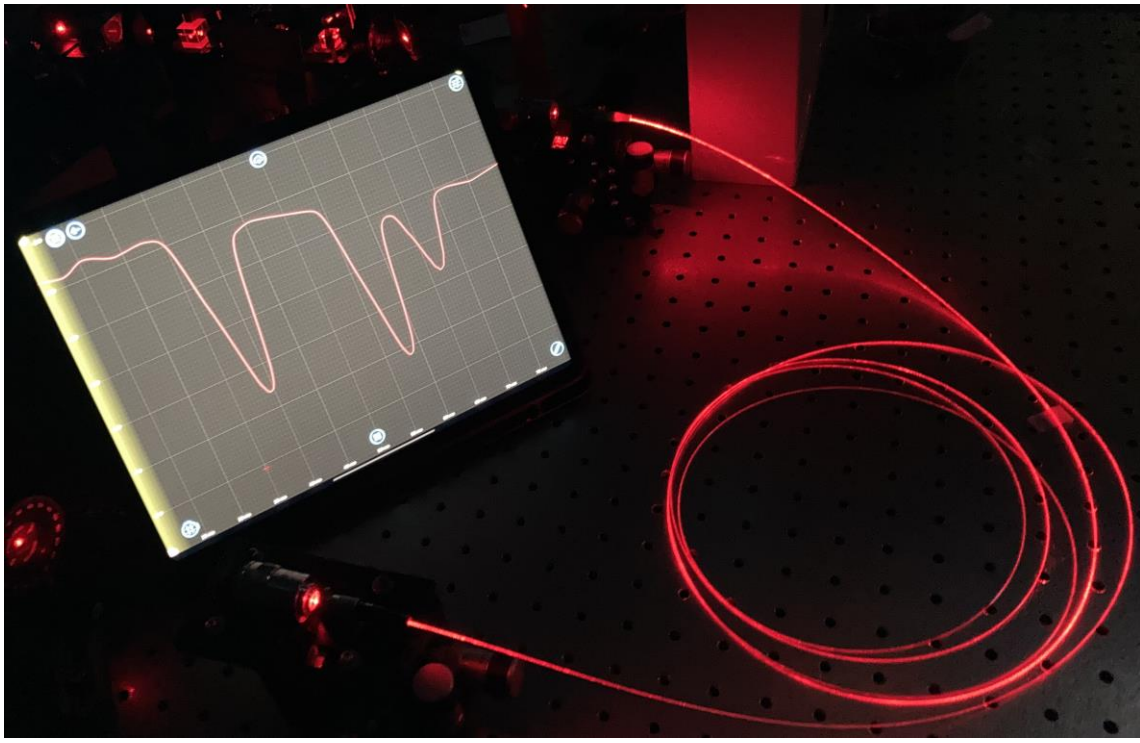
Quantum Technology

GLOphotonics
The Hollow-Core PCF & Photonic MicroCell™ company

Iodine PMC Frequency Reference

Exceptional spectroscopic performance in an all-fiber

Plug & Play Frequency Standards



Small footprint

High absorption contrast

Room-temperature operation

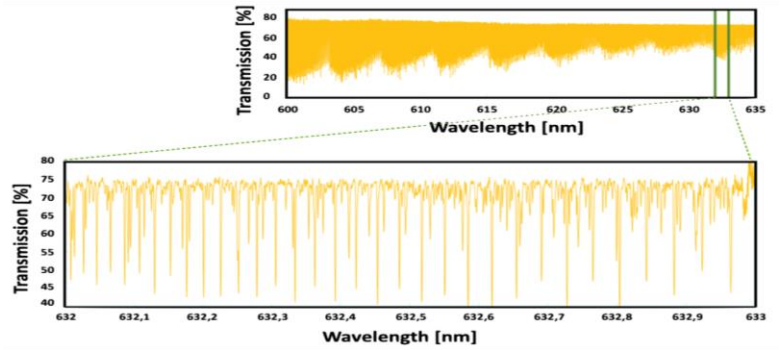
Wide range of wavelengths in the visible range

Navigation/Defense

Laser Locking

Astronomy

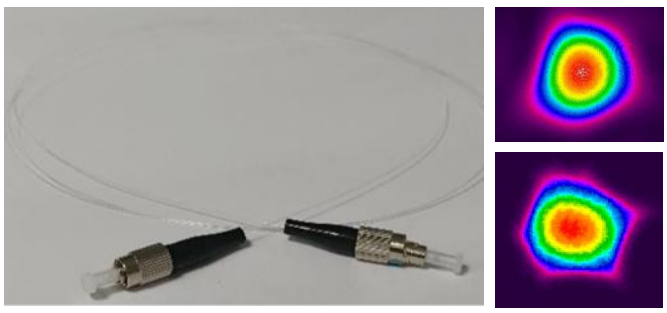
Spectroscopic [1] and optical properties

Molecule	Iodine (I_2)
Wavelength range (nm)	500 to 700
Absorption contrast *C* (for P(33)6-3 line at 633 nm)	40 % ≤ C ≤ 60 % [1]
FWHM linewidth (for P(33)6-3 line at 633 nm)	≤ 1.04 GHz
Typical spectrum of a I_2 PMC [2] (I_2 has a forest of resonances spanning from 500 nm to 700 nm, with resonances every ~ 0.01 nm. This graph gives a general idea of the resonance structure)	
Off-resonance transmission [3]	> 30 % [4]

Physical Properties

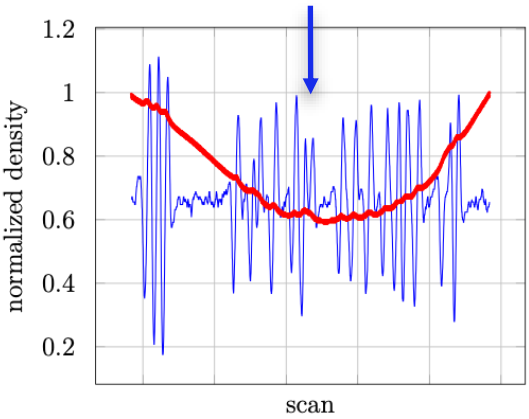
Total length [5]	1 m ≤ L ≤ 5 m
Connector types	Input port: FC/PC or FC/APC Output port: FC

(1) At room temperature (20°C)
(2) Data taken from H. Salami et. al., Journal of Molecular Spectroscopy , volume 223, p. 157-159, Sept 2005.
(3) Free-space coupling conditions
(4) For lower transmission or other requirements, contact us
(5) The length of the PMC is adjusted within the reported range to fit customer spectroscopic properties requests
All specifications may be changed without notice



Compact, shapeable architecture

Large Lock Signal at Room Temperature



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