stretch.
Fully-automated tuning at high resolution

2500 – 6900 cm\(^{-1}\)
CW optical parametric oscillator

For continuous molecular spectroscopy of “stretch” vibrations...

... over a very wide range

learn more...

www.toptica.com/TOPO
DLC TOPO | Signal | Idler
---|---|---
Coarse tuning range (standard system) | 1.45 - 2.07 µm | 2.19 - 4.00 µm
 | 4830 - 6900 cm⁻¹ | 2500 - 4570 cm⁻¹
Coarse tuning range (high power system) | 1.43 - 2.07 µm | 2.19 - 4.20 µm
 | 4830 - 7000 cm⁻¹ | 2380 - 4570 cm⁻¹
Mode hop free tuning range | -- | > 30 GHz (> 100 GHz typ.)
Linewidth | < 100 kHz | < 2 MHz (< 100 kHz opt.)
 | < 1x10⁶ cm⁻¹ | < 1x10⁴ cm⁻¹
Output power (standard system) | > 10 mW at > 1.45 µm | > 10 mW at < 4.00 µm
 | > 2 W at > 1.55 µm | > 1 W at < 3.6 µm
 | > 4 W peak | > 2 W peak
Output power (high power system) | > 10 mW at > 1.43 µm | > 10 mW at < 4.20 µm
 | > 4 W at > 1.60 µm | > 2 W at < 3.5 µm
 | > 5 W peak | > 5 W peak
Beam Quality Factor M² | < 1.2 at < 3.6 µm | < 1.2 at < 3.6 µm

**Characteristic tuning curve.**

**Energy level diagram including influence of tuning mechanisms.**

**System diagram**