1880 S Flatiron Ct Suite F
Boulder, CO 80301

Saguaro-MIR

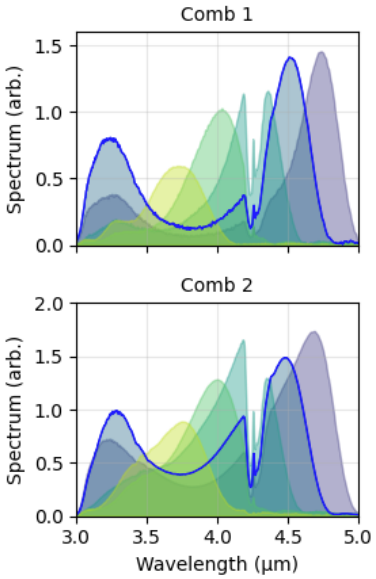
Fully packaged 3-5µm MIR dual-comb spectrometer



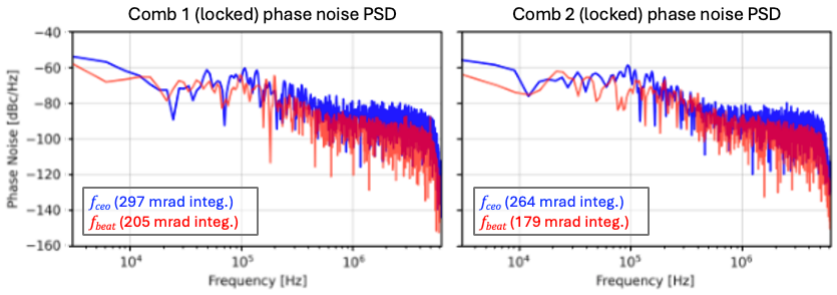
The Chi3 Optics Saguaro-MIR is a portable MIR dual comb system, complete with integrated locking electronics and common CW laser. The system delivers broadband MIR light spanning the 3-5µm range as a free space output. Onboard f-2f interferometer, common CW laser, beat detection and associated servos enable full comb stabilization for broadband spectroscopy with maximum SNR and flexible acquisition speed.

Specification	*Performance*
Dimensions (W x L x H)	45 cm x 45 cm x 45 cm
Weight	45 kg (99 lbs)
Wavelength range	3-5 µm
Optical output	1 mW output (free-space)
Repetition rate	100 MHz nominal Others available upon request
f_{rep} tuning range	22 kHz on 100 MHz

MIR spectra for different crystal poling periods (blue outline default)



Phase locking performance



Open path (4m outdoor) MIR DCS measurement

