1880 S Flatiron Ct Suite F
Boulder, CO 80301

Aspen

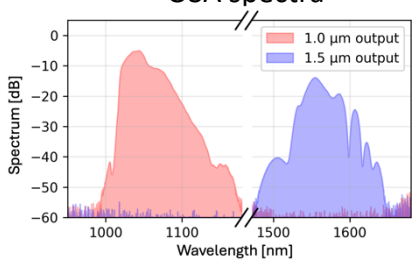
Two color 1/1.5 µm frequency comb



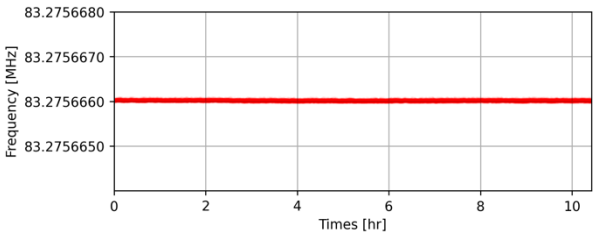
The Chi3 Optics Aspen is a turnkey two-color frequency comb system based on a robust Er:fiber modelocked laser. The system delivers amplified ultrafast pulses at 1 µm, while coherently connected 1.5 µm light can be used for repetition-rate locking, full frequency comb stabilization, or two-branch MIR generation. The Aspen is available with add-ons for high-power amplification in both the 1 and 1.5 µm branches, and grating compressor module for pulse compression and free-space delivery.

Specification	*Performance*
Dimensions (W x L x H)	20 cm x 18 cm x 16 cm
Center wavelength	1040nm, 1560 nm
Optical output 1 (1 µm)	>200 mW output (LC/APC PM980), optional free-space delivery at ~100 fs FWHM
Optical output 2 (1.5 µm, main)	>5 mW output (LC/APC PM1550)
Optical output 3 (1.5 µm, tap)	>0.5 mW output (LC/APC PM1550)
Repetition rate	100 MHz nominal 10 MHz – 200 MHz available
SMA inputs	Fast/slow PZT, pump current servo
f_{rep} tuning range	22 kHz on 100 MHz
Control interface	Touchscreen (serial control upon request)

OSA spectra



Rep-rate match, lock to RF input 83.275666 MHz



High power amplifier add-on: 1 µm pulse/spectrum/stability at >3W/100MHz

