



FRINGEEZZ

Integrated CEP detector

Specifications

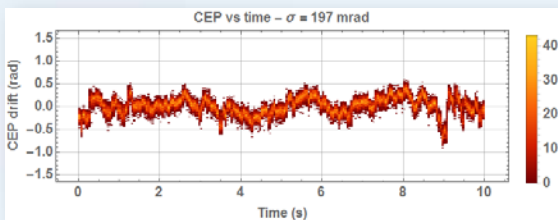
SINGLE SHOT CARRIER-ENVELOPE-PHASE MEASUREMENT

- ✓ Single-shot CEP measurement at multi-kHz repetition rates
- ✓ Real time data analysis and data logging
- ✓ Plug and play feedback with the Dazzler CEP module

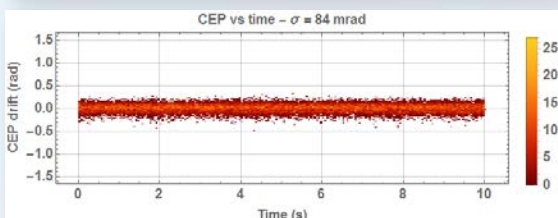
- CEP measurement speed up to 15 kHz
- Maximum laser repetition rate for single shot measurements > 100 kHz
- Measurement resolution 6 – 10 mrad
- Real time software analysis PSD, Statistics, Data-logging
- Hardware-only feedback, loop management by software.
- Optical input requirements
 - 5 to 15 interference fringes
 - On a 80 nm bandwidth centered between 800 and 900 nm
 - Or
 - On a 30 nm bandwidth centered around 510 nm
 - Fringes contrast >50%
 - Entrance slit 50 μ m
 - Energy 15-25nJ on the specified bandwidth

✓ Record CEP stabilization data with the Fringeezz / Dazzler loop

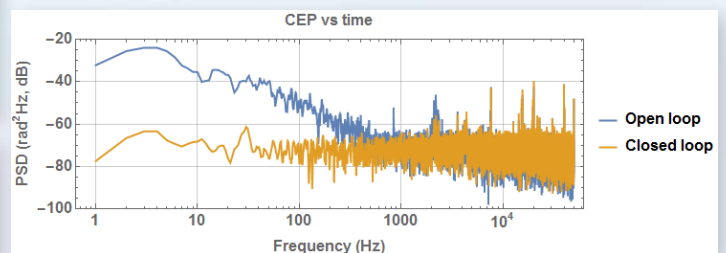
Open loop
197mrad



Closed loop
84mrad



PSD, open / closed loop



CEP data from Fastlite STARZZ OPCPA