



FRINGEEZZ

Integrated CEP detector

Specifications

SINGLE SHOT CARRIER-ENVELOPPE-PHASE MEASUREMENT

✓ Single-shot CEP measurement at multi-kHz repetition rates

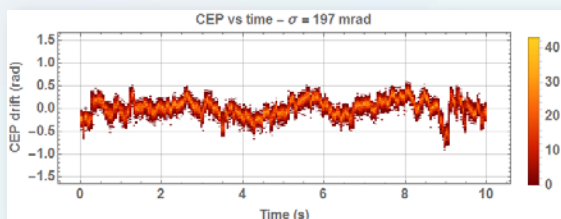
✓ Real time data analysis and data logging

✓ Plug and play feedback with the Dazzler CEP module

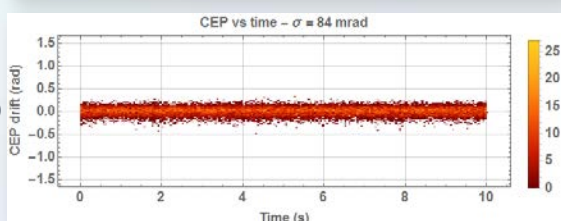
- CEP measurement speed > 10 kHz
- Maximum laser repetition rate for single shot measurements > 100 kHz
- Measurement resolution 6 – 10 mrad
- Real time software analysis PSD, Statistics, Data-logging
- Hardware-only feedback, loop management by software.
- Optical input requirements
 - 5 to 15 interference 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 25 μ m
 - Energy 15-25nJ on the specified bandwidth

✓ Record CEP stabilization data with the Fringezz / Dazzler loop

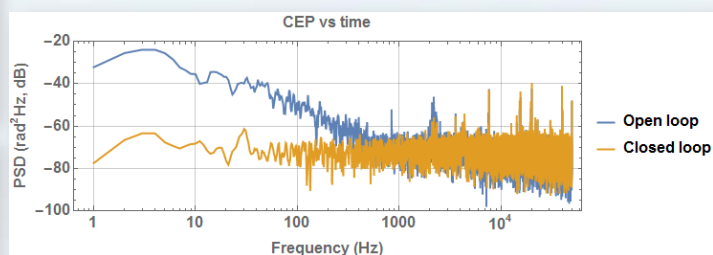
Open loop
197mrad



Closed loop
84mrad



PSD, open / closed loop



CEP data from Fastlite STARZZ OPCPA