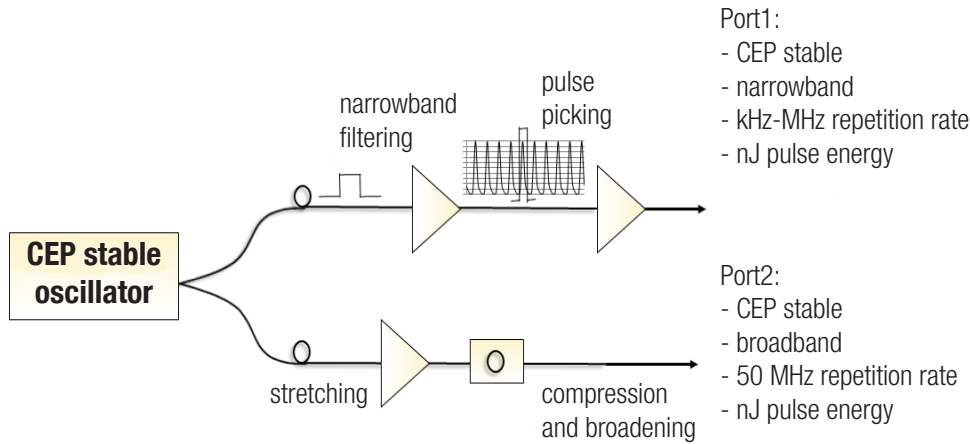


CEP Stable orange

CEP Stable Two-Arm Fiber Laser Front End



Menlo Systems' femtosecond Yb fiber-based laser sources are the perfect platform for carrier envelope phase (CEP) stable lasers. Based on the successful orange laser we have extended the product line to include a carrier envelope phase stable front end. The CEP Stable orange is engineered to provide the front end for optical parametric chirped pulse amplification (OPCPA). It delivers a synchronized, CEP stable two-arm output consisting of a narrowband output around 1030 nm at a programmable repetition rate in one arm, and a broadband output at the full repetition rate in the second arm. The narrowband output serves as input into a booster amplifier to generate the pump light for the OPCPA process, whereas the broadband output serves as the seed light for the OPCPA process itself.

APPLICATION EXAMPLE

Optical Parametric Chirped Pulse Amplification (OPCPA)

CEP stable laser pulses are an important tool for investigating light-matter interactions. Table-top sources nowadays can reach the limits of the perturbative regime and such enable extreme nonlinear optics. OPCPA is typically used to generate and provide the CEP stable few-cycle pulses in the near infrared to drive the nonlinear processes. The Menlo Systems CEP stable orange is a compact fiber based laser replacing more traditional Ti:Sapphire lasers as front end.

CARRIER ENVELOPE PHASE STABILIZATION (CEP)
 Intra-cavity dispersion control for CEP stable lasers is a proprietary and patented technology from Menlo Systems. Please contact us if you wish to receive further information.

APPLICATIONS

- Front End for OPCPA Amplifiers
- Generation of Attosecond Pulses
- Coherent Control

FEATURES

- Two-arm CEP Stable Output
- Low Amplitude and Phase Noise
- All-PM Solution
- Menlo figure 9[®] Technology
- Fast Intra-cavity Actuator for CEP Control

OPTIONS

- **Custom Configuration of Output Ports**
- **Fast Intra-cavity Actuator for Repetition Rate Control**
- **SYNC100 Repetition Rate Synchronization**
 Tunable cavity length by high-bandwidth piezo-controlled synchronization
- **VARIO User-Defined Repetition Rate**
 Factory-set value selectable in the 50-250 MHz range
- **MULTIBRANCH Additional Seed Ports**
 Seeding of multiple amplifiers with optional subsequent frequency conversion to cover multiple wavelengths

Technology protected by patents US6785303, US6724788, US7026594, DE10044404, US7804863, US8995796, US8873601, JP4668423, JP5615397, CN103311780

ORDERING INFORMATION

Product Code	CEP Stable orange
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MenloSystems Customize your laser with the available options to match the requirements of your application. Please contact us in order to request more information.

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