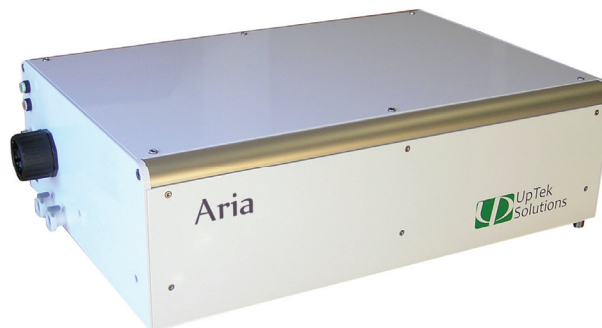


Aria

Mode-locked Femtosecond Laser



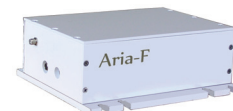
FEATURES

- Integrated CW pumped laser
- Bandwidth up to 60 nm
- Capable of compress pulse down to 20 fs
- Hand-free operation, fully automated
- $\pm 10^{\circ}\text{C}$ operating environment
- Ideal for ultrafast amplifier seeding

Aria series are mode-locked oscillators, suitable for Ti:Sapphire amplifier seeding, such as UpTek Solutions Corp's Phidia ultrafast amplifiers.

Aria-Ti-500 is a broad-band, kerr-lens mode locked femtosecond oscillator with a pump laser integrated. It is able to deliver more than 500mW mode-locked output and is capable of producing up to 60nm broadband spectrum. Aria-Ti-500 features compact size, user-friendly operation and long-term reliability.

Aria-F-10 is a SHG mode-locked Er doped fiber laser. It is completely formed by environmental-insensitive PM-fiber components and features hand-free operation in industrial environment with operation temperature from 15 to 40 °C. It is the first choice for Ti:Sapphire amplifier seeding.



APPLICATIONS

- Ultrafast laser amplifier seeding
- Harmonic generation
- THz generation
- OTC (Optical Coherence Tomography)

| | Aria-Ti-500 | Aria-F-10 |
|-------------------------------|---------------------------------------|---------------------------------------|
| Output Power | >500mW | >10mW |
| Repetition Rate | 84MHz \pm 4MHz | 30MHz \pm 10MHz |
| Center Wavelength | 790nm \pm 10nm | 790nm \pm 10nm |
| Typical Spectrum Width | ~40nm | ~ 8nm |
| Tunable Range | 770nm-830nm | N/A |
| Spatial Mode | TEM ₀₀ M ² <1.1 | TEM ₀₀ M ² <1.1 |
| Beam Size (1/e ²) | ~ 1.5 mm | ~ 1 mm |
| Power Stability | < \pm 1 % | < \pm 1.5 % |
| Noise | <0.5% RMS | < 2% RMS |
| Beam Divergence, Full Angle | <1 mrad | <1 mrad |
| Polarization | Linear, Horizontal | Linear, Horizontal |
| Dimension (Laser head) | 20.6"L x 14"W x 7"H | 7"L x 6"W x 3"H |