

# Aria-Ti

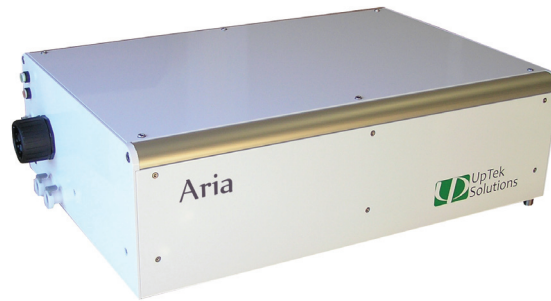
## Kerr-lens Mode-locked Ti:Sapphire Femtosecond

### FEATURES

- Integrated CW Green laser
- Bandwidth up to 60 nm
- Capable of compress pulse down to <20 fs
- Hand-free operation, fully automated
- Ideal for ultrafast amplifier seeding

### APPLICATIONS

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



The Aria-Ti series are broad-band, kerr-lens mode locked femtosecond oscillators with an integrated pump laser. It is capable of producing up to a 60nm broadband spectrum and high-power mode-locked output. The Aria-Ti series feature compact size, user-friendly operation and long-term reliability.

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

	Aria-Ti-500	Aria-Ti-800	Aria-Ti-HP
Output Power	>500mW	>800mW	>2500mW
Repetition Rate	80MHz ± 4MHz	80MHz ± 4MHz	85MHz ± 5MHz
Center Wavelength	800nm ±10nm	800nm ±10nm	800nm ±10nm
Typical Spectrum Width	>40nm	>40nm	~10nm
Tunable Range	770nm-830nm	770nm-830nm	770nm-830nm
Spatial Mode	TEM <sub>00</sub> M <sup>2</sup> <1.1	TEM <sub>00</sub> M <sup>2</sup> <1.1	TEM <sub>00</sub> M <sup>2</sup> <1.1
Beam Size (1/e <sup>2</sup> )	~ 1.5 mm	~ 1.5 mm	~ 1.5 mm
Power Stability	< ±1 %	< ±1 %	< ±1 %
Noise	<0.05% RMS	<0.05% RMS	< 0.5% RMS
Beam Divergence, Full Angle	<2 mrad	<2 mrad	<1 mrad
Polarization	Linear, Horizontal		
Dimension (Laser head)	20.5"L x 14.2"W x 6"H		

# Aria-F

## Mode-locked All PM-fiber Femtosecond Oscillator

### FEATURES

- All PM-fiber oscillator
- Bandwidth up to 10 nm
- Capable of compress pulse down to 100 fs
- Hand-free operation, fully automated
- $\pm 10^{\circ}\text{C}$  operating environment
- Ideal for ultrafast amplifier seeding
- Super reliability for industrial application



Aria-F series are SHG mode-locked Er-doped fiber laser oscillators. They are completely formed by environmental-insensitive PM-fiber components and feature hands-free operation in an industrial environment with wide operation temperature range. It is the first choice for ultrafast laser amplifier seeding in industrial environments, such as UpTek Solutions Corp's Phidia and Phidia-C series.

### APPLICATIONS

- Ultrafast laser amplifier seeding
- Harmonic generation
- THz generation

	Aria-F-10	Aria-F-100
Output Power	>10mW	>100mW
Repetition Rate	40MHz $\pm$ 5MHz	40MHz $\pm$ 10MHz
Center Wavelength	790nm $\pm$ 10nm	790nm $\pm$ 10nm
Typical Spectrum Width	> 10nm	> 10nm
Tunable Range	N/A	N/A
Spatial Mode	TEM <sub>00</sub> M <sup>2</sup> <1.1	TEM <sub>00</sub> M <sup>2</sup> <1.1
Beam Size (1/e <sup>2</sup> )	~ 1 mm	~ 1 mm
Power Stability	< $\pm$ 1.5 %	< $\pm$ 1.0 %
Noise	< 2% RMS	< 1% RMS
Beam Divergence, Full Angle	<1 mrad	<1 mrad
Polarization	Linear, Horizontal	Linear, Horizontal
Dimension (Laser head)	7"L x 6"W x 3"H	9"L x 6"W x 3"H