

# WHITE DWARF

OPCPA 5W powered by Coherent



## ACCELERATE YOUR RESEARCH

The **White Dwarf** OPCA powered by Coherent is a high-performance femtosecond laser fully integrated in a compact housing. Our latest version offers wavelength tunability and a dual output option for pump-probe spectroscopy making it the most flexible non-colinear OPA on the market.

### AVERAGE POWER

5 W

### WAVELENGTH OPTIONS

650 nm ————— 2000 nm

### PULSE DURATION

10 fs ————— 50 fs

### PUMPED BY

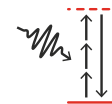
Coherent Monaco ————— 60 W

### REPETITION RATE

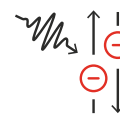
750 kHz ————— 10 MHz



- in-vivo brain imaging



- Multiphoton absorption imaging



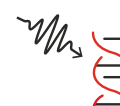
- Spin dynamics
- Superconductivity



- Deep optical imaging of tissue



- Carrier dynamics of solid materials
- Photosynthesis



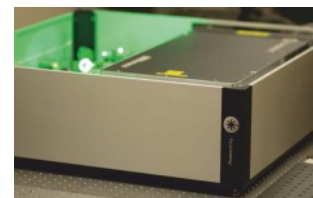
- Optogenetics

# PRODUCT SPECIFICATIONS

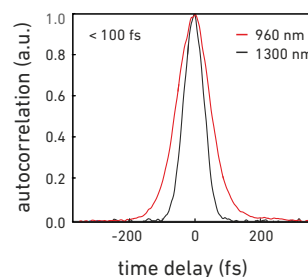
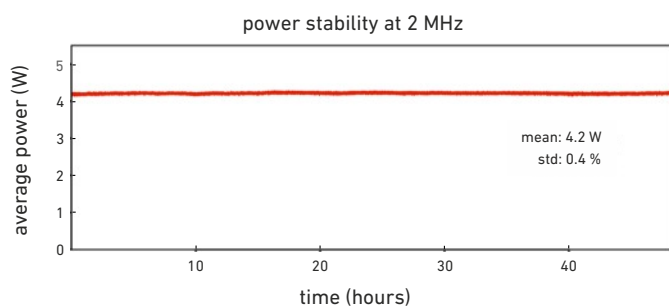
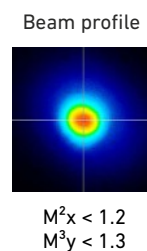
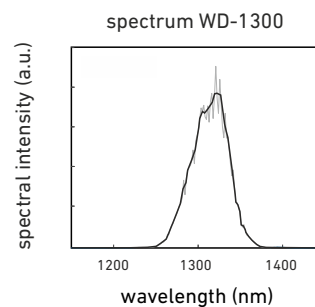
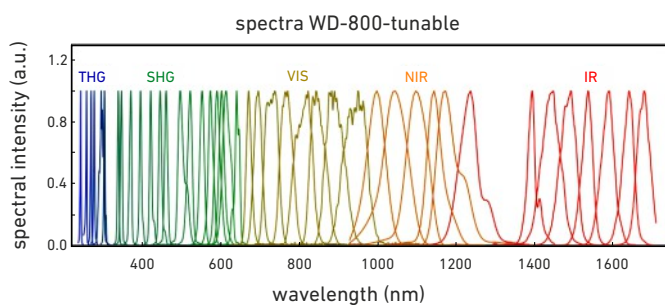
	for multi-photon microscopy	for ultrafast material science	for few-cycle pulses		
	WD-1300	WD-1300-dual	WD-800-tunable-dual	WD-800	WD-2000
Central wavelength	1300 nm	Two synchronized outputs: 960 and 1300 nm, or 1300 and 1700 nm		800 nm	2000 nm
Pulse duration (FWHM)	< 50 fs	< 50 fs	I: < 100 fs II: < 30 fs	< 9 fs	< 30 fs
Average power	> 4 W	> 2 W each output	> 2 W each output	> 5 W	> 5 W
Pulse energy	> 4 μJ	> 2 μJ each output	> 2 μJ each output	> 5 μJ	> 5 μJ
Repetition rate	single-shot to 10 MHz	single-shot to 10 MHz	single-shot to 4 MHz	single-shot to 10 MHz	single-shot to 10 MHz
Beam quality M2	< 1.3	< 1.3	< 1.3	< 1.3	< 1.3
Power stability (12 hrs)	< 1 %	< 1 %	< 1 %	< 1 %	< 1 %
Dimensions	80 cm x 80 cm	80 cm x 120 cm	80 cm x 120 cm	80 cm x 80 cm	80 cm x 120 cm
SHG, THG or mid-IR	on request				
Pump laser incl.	Coherent Monaco 60 W	Coherent Monaco 60 W	Coherent Monaco 60 W	Coherent Monaco 60 W	Coherent Monaco 60 W
CEP stability				on request	on request

## HIGHLIGHTS

The **White Dwarf** OPCPA powered by Coherent has its pump laser already on board to enter the next level of stability. We integrate the Coherent Monaco industrial femtosecond laser on a small footprint with state-of-the-art White Dwarf OPCPA technology to bring industrial performance to scientific output parameters. The White Dwarf OPCPA can be equipped as dual output system to offer pump-probe capabilities for ultrafast material science or as fixed wavelength version for high-volume 3D bio-imaging.



## PERFORMANCE EXAMPLES



Measurement data are examples. Specifications are subject to change without notice.  
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