

# FSX-SERIES FEMTOSECOND LASERS

### MULTI-WAVELENGTH - TURN-KEY- 24/7 OPERATION



- Turn-key, Easy to use & rugged
- Compact & air-cooled
- Dual-output
- Wavelength tuneable
- High power
- Synchronized pulses
- Low RIN & phase noise

The FSX-series is a **versatile**, **turn-key** and **compact femtosecond laser** perfectly matched for multiphoton imaging and other biophotonic applications.

The **air-cooled laser** is engineered for sustained **24/7 operation**. Temperature fluctuations between 18 °C and 28 °C have no influence on the performance, mitigating concerns about misalignment over time and operating environment.

		FSX-1030	FSX-DUAL	FSX-TUNE
First wavelength:	1030 nm			
Second wavelength:	765 - 940 nm (fixed in range)			
Second wavelength:	765 - 940 nm (tunable in range)			

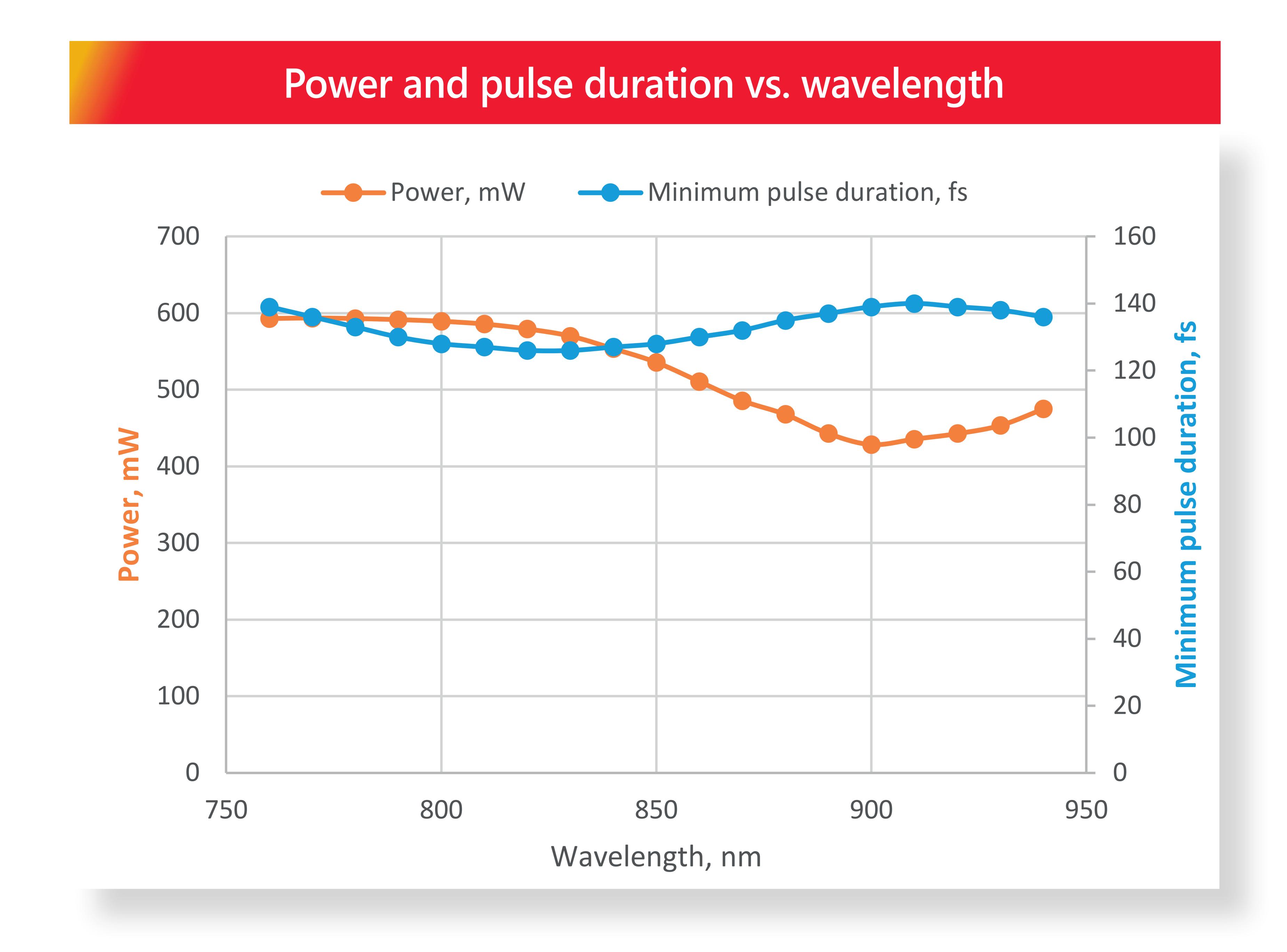
#### Broad range of applications:

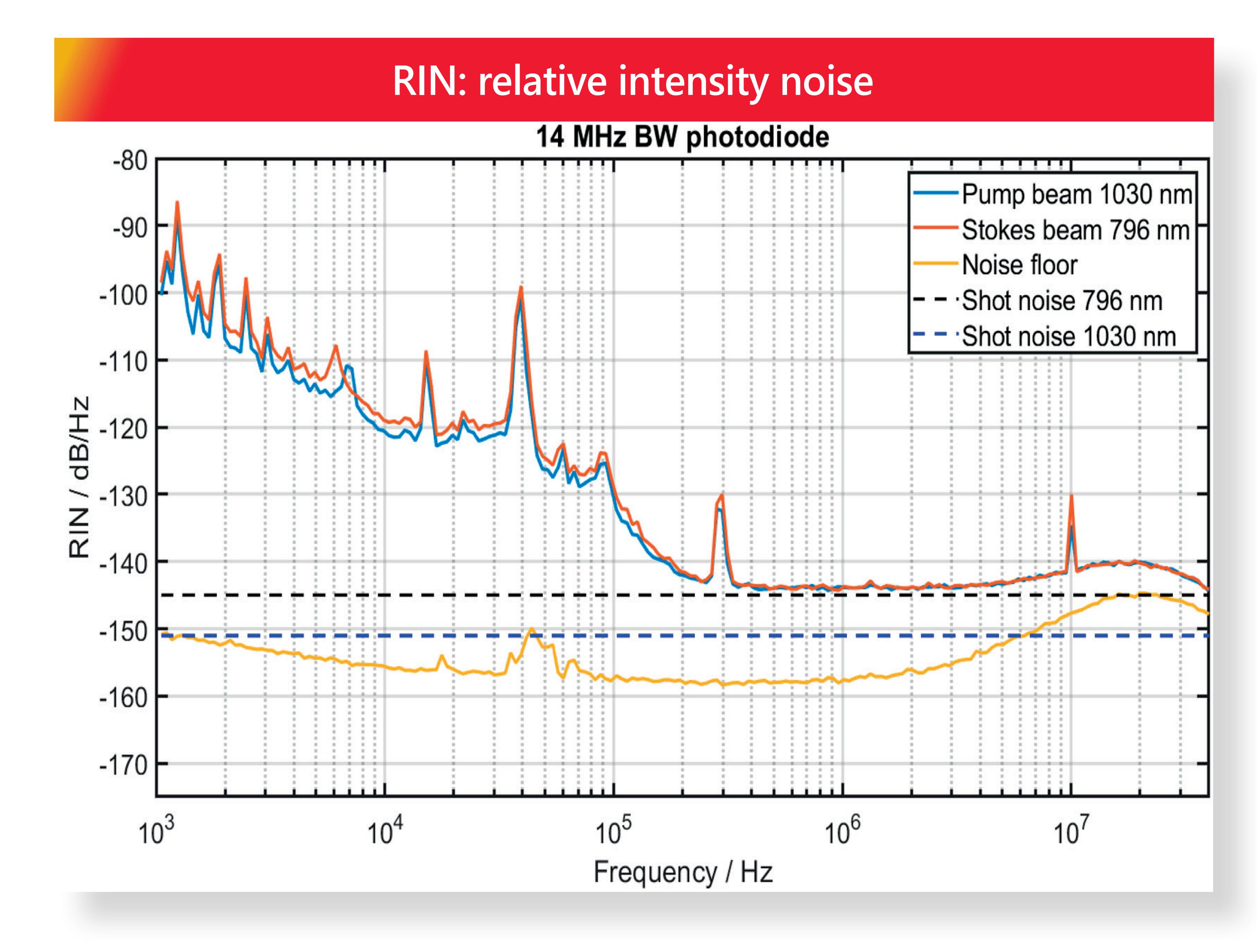
- 2P polymerization
- 2P/SHG/THG microscopy
- Supercontinuum generation
- FLIM microscopy
- FLIIVI IIICI OSCOPY
- Terahertz generation

Amplifier seeding

- Spectoscopy
- Quantum optics
- Neuroscience & Optogenetics

Coherent Raman Imaging (CARS/SRS)





## SPECIFICATIONS

		FSX-1030	FSX-DUAL	FSX-TUNE
Single-wavelength:	1030 nm			
Second wavelength:	765 - 940 nm (fixed in range)			
Second wavelength:	765 - 940 nm (tunable)			
Pulse duration			<140 fs	
Average output power	r per wavelength	>5 W	>1 W @ 1030 nm >500 mW @ 2 <sup>nd</sup> λ	>1 W @ 1030 nm >500 mW over range
Pulse energy		>50 nJ	>12.5 nJ @ 1 <sup>st</sup> λ >5 nJ @ 2 <sup>nd</sup> λ	>12.5 nJ @ 1 <sup>st</sup> λ >5 nJ @ 2 <sup>nd</sup> λ
Pulse repetition rate*			100 MHz * on request 40-250MHz	
Beam quality			M <sup>2</sup> < 1.15, TEM <sub>00</sub>	
PER			>23 dB	
Pointing stability		30 µrad rms (	12 h) const. temperature, <5 μr	ad / °C 18 - 27°C
Laser output			Collimated free space	

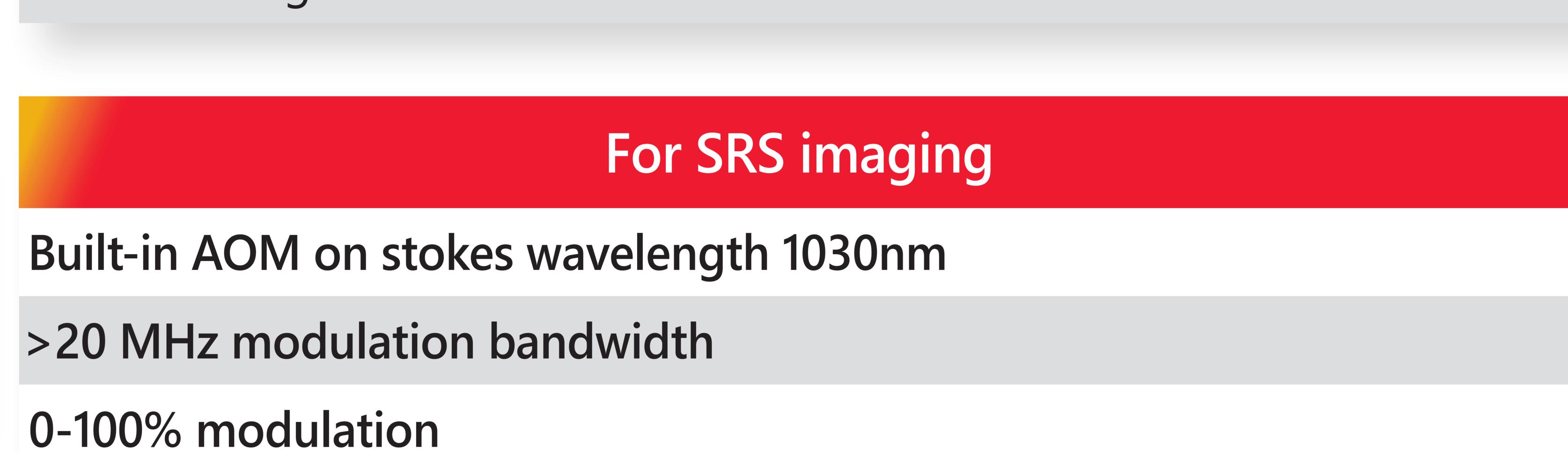
	Mechanical
Size laser head	560 x 350 x 125 mm <sup>3</sup>
Weight laser head	10 kg
Size laser controller	495 x 295 x 165 mm <sup>3</sup>
Weight laser controller	10 kg

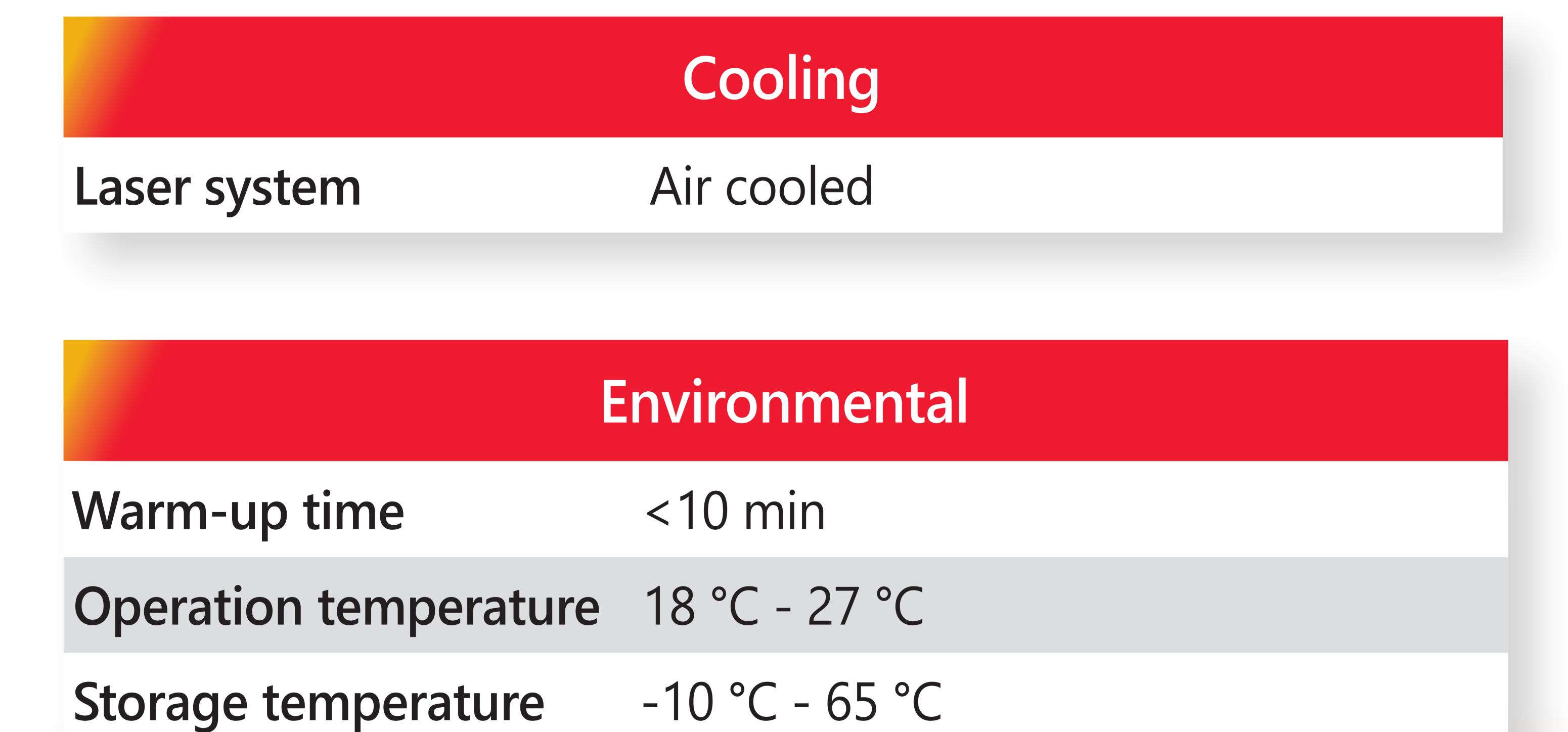
Electrical

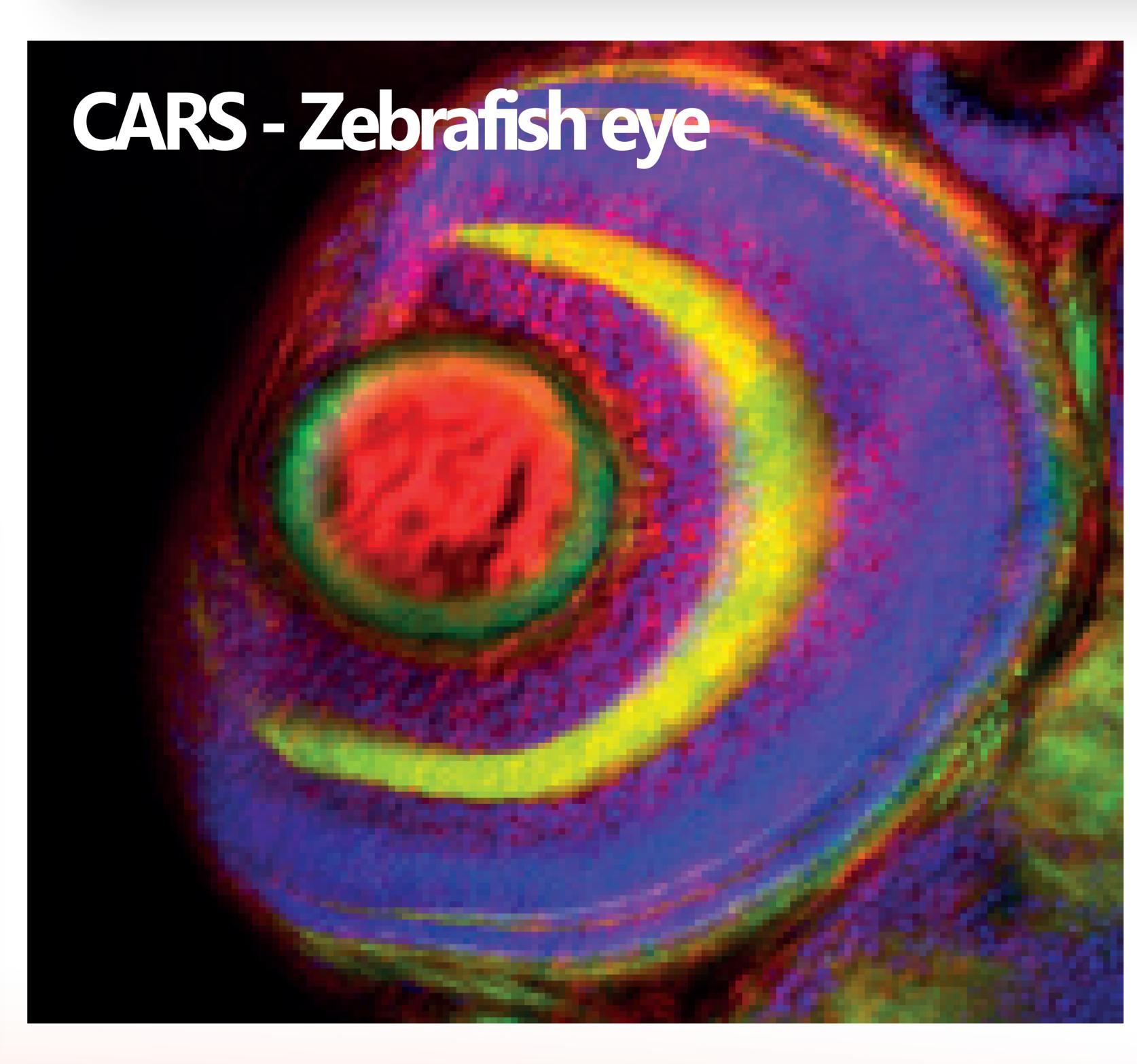
<500 W

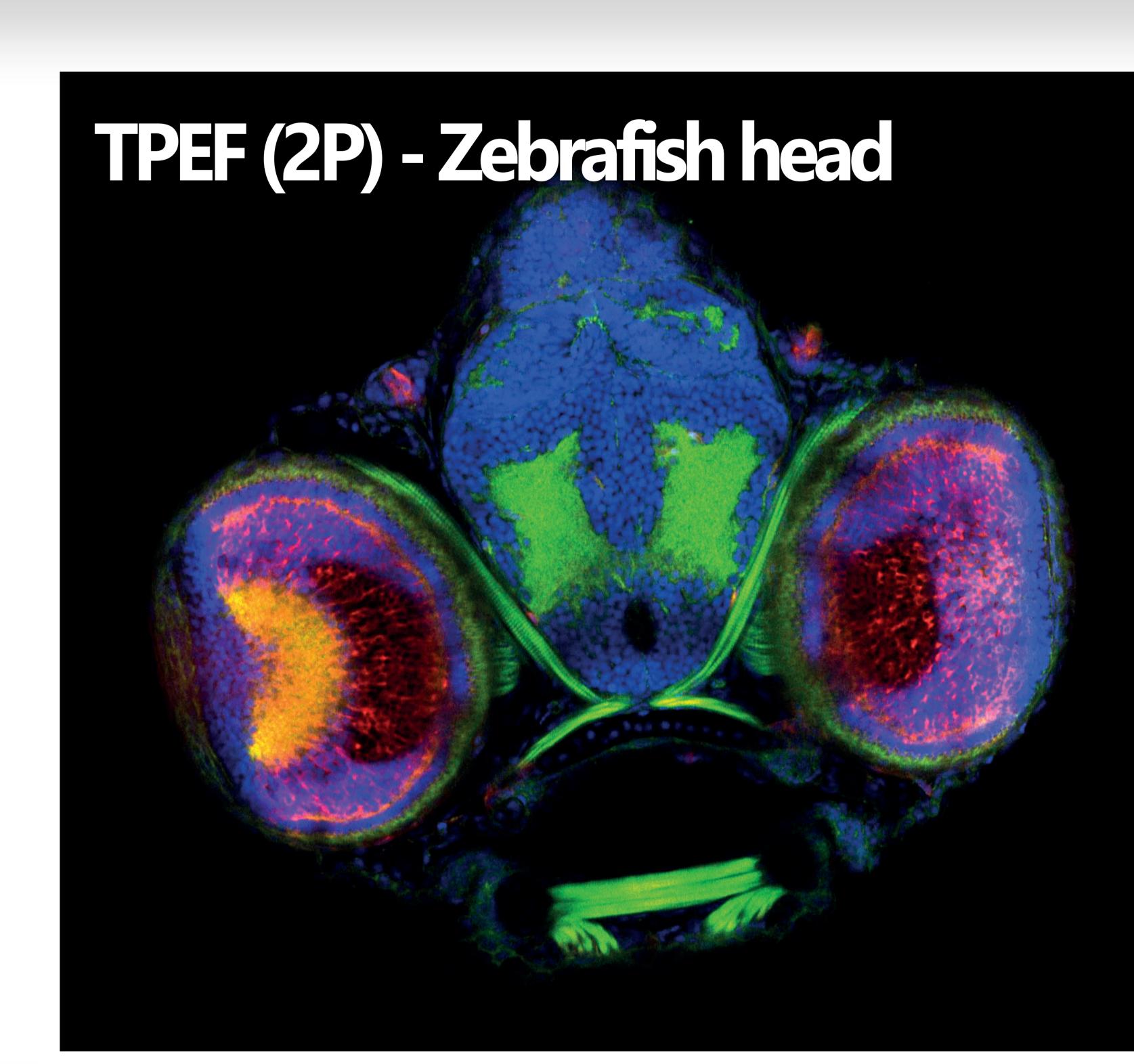
90 - 264 VAC, 47 - 63 Hz

Options / Warranty		
Built in AOM for power control and galvo flyback blanking.		
Dispersion pre-compensation 040'000 fs <sup>2</sup> .		
Warranty up to 5 years in total.		
Water cooling.		











## CONTACTS

EU

Power supply

Power consumption

Prospective Instruments LK OG

6850 Dornbirn, Austria Email contact@p-inst.com www.p-inst.com

SWITZERLAND

Prospective Instruments GmbH

8105 Regensdorf, Switzerland Email contact@p-inst.com www.p-inst.com



















