

OPCPA | HR

High Repetition Rate OPCPA Systems

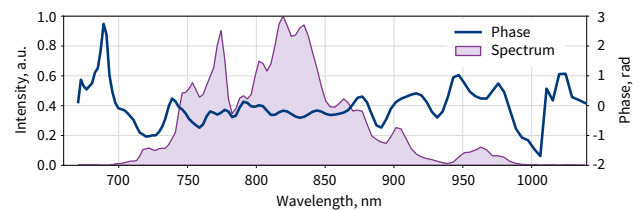
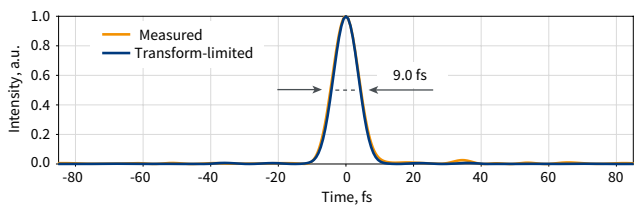
Pumped by InnoSlab or Thin-Disk Lasers, Optionally Seeded by ORPHEUS-OPCPA

InnoSlab and thin-disk lasers based on Yb:YAG are the state-of-the-art high average power lasers of today. These lasers lend themselves extremely well to pumping OPCPA systems, and LIGHT CONVERSION is happy to offer OPCPA solutions designed to work with these lasers. Available either bundled with state-of-the-art multi-100 W lasers or as standalone modules designed to work with your laser.

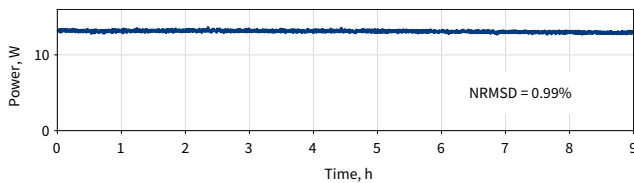
- Wavelength(s), pulse duration, and energy are customizable – contact sales@lightcon.com for more details.
- A single pump laser can be combined with more than one OPCPA option in either switchable or simultaneous operation

CONFIGURATIONS

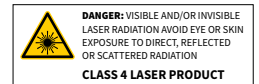
Wavelength	800 nm	1.6 μm	2 μm	3 μm
Pulse duration	< 9 fs	< 35 fs	< 25 fs	< 35 fs
	Repetition rate		Pulse energy / Output power	
HR-20	20 kHz	0.8 mJ / 16 W	1.6 mJ / 32 W	1.3 mJ / 26 W
HR-200	200 kHz	110 μJ / 22 W	270 μJ / 54 W	200 μJ / 40 W



ORPHEUS-HR output pulse and spectrum



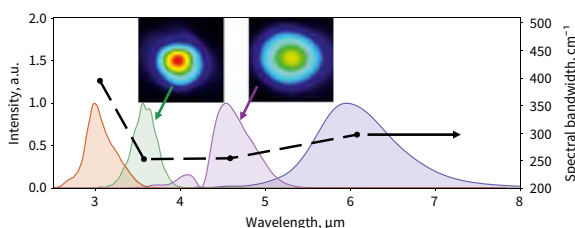
Output power stability over 9 h of OPCPA-HR (800 nm, 100 kHz)



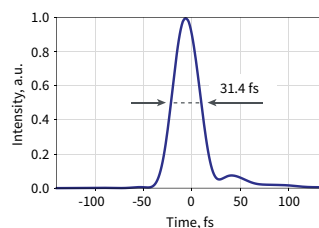
Mid-IR Wavelength Extensions

For ORPHEUS-OPCPA and OPCPA-HR

2 μm models of ORPHEUS-OPCPA and OPCPA-HR can be equipped with a DFG module for efficient generation of tunable broad-bandwidth mid-IR pulses; contact sales@lightcon.com for more details.



Example spectra using ORPHEUS-OPCPA DFG module



Output pulse and spectrum at 3.4 μm using ORPHEUS-OPCPA DFG module

