

## **ORPHEUS-MIR – the source for broadband mid-IR pulses**

The largest manufacturer of femtosecond optical parametric amplifiers (OPAs), LIGHT CONVERSION, launched an ultrafast source based on OPA technology for broadband mid-IR pulses – ORPHEUS-MIR.

ORPHEUS-MIR is a versatile system optimized for the efficient generation of broadband mid-IR pulses. The system provides broadband pulses with bandwidth up to  $500\text{ cm}^{-1}$  in the tuning range of 2500 – 11000 nm, and it reaches up to 15000 nm with optional narrowband extension. ORPHEUS-MIR architecture is well-suited for high energy and high power PHAROS and CARBIDE lasers.

Intense ultrashort broadband pulses in mid-IR perfectly suit a number of scientific applications, including but not limited to broadband vibrational sum-frequency generation (SFG) spectroscopy, time- and angle-resolved photoemission spectroscopy (TR-ARPES), high-harmonic generation (HHG), and other applications.

Key features of ORPHEUS-MIR:

- Broad bandwidth up to  $500\text{ cm}^{-1}$
- Broad tuning range 2500 – 11000 nm
- Pulse duration of <100 fs
- Up to 40 W pump power, up to 2 mJ pump energy
- Auxiliary broadband output at ~2 000 nm
- Optional narrowband extension up to 15 000 nm
- Optional CEP stability

Detailed ORPHEUS-MIR description can be found here: <http://lightcon.com/Product/ORPHEUS-MIR.html>.

### **About LIGHT CONVERSION:**

LIGHT CONVERSION is the world-leading manufacturer of wavelength-tunable femtosecond optical parametric amplifiers with worldwide recognized TOPAS and ORPHEUS series products. LIGHT CONVERSION designs and manufactures industrial femtosecond lasers PHAROS and CARBIDE, harmonics generators, and comprehensive spectroscopy systems HARPIA, as well as state-of-the-art optical parametric chirped-pulse amplification (OPCPA) systems. All together the portfolio forms a best-in-class set of devices for femtosecond applications in industry, medicine, and research. Over 26 years, LIGHT CONVERSION has maintained stable growth in international markets and established itself as a world-class manufacturer of high-value laser products while keeping close ties with academia and investing significantly back into its core research and development operations.

### **For further information please contact:**

LIGHT CONVERSION

Phone: +370 5 249 18 30



E-mail: [sales@lightcon.com](mailto:sales@lightcon.com)  
[www.lightcon.com](http://www.lightcon.com)