

# Chromacity Haskeir

Tunable Long Wavelength IR Laser



The **Chromacity Haskeir** is a tunable picosecond light source. The optical parametric oscillator (OPO) delivers broad bandwidth coherent light across the  $4.5\ \mu\text{m} - 12\ \mu\text{m}$  ( $2200\ \text{cm}^{-1} - 850\ \text{cm}^{-1}$ ) spectral region.

## 01 Applications

- Laser spectroscopy including:
  - FTIR spectroscopy
  - Stand-off detection
  - Identification of volatile compounds
- Nonlinear physics research
- Material characterisation

## 02 Features

- Tunability across  $4.5 - 12\ \mu\text{m}$
- Output power:
  - Up to 100 mW at  $4.5 - 7\ \mu\text{m}$
  - Up to 20 mW at  $12\ \mu\text{m}$
- Quasi-CW, providing instantaneous broad bandwidth spectra
- 100 or 200 MHz repetition frequency available
- Remote installation capability

## 03 Ease of Use

- Control via web-based interface
- RS-232 connection also available

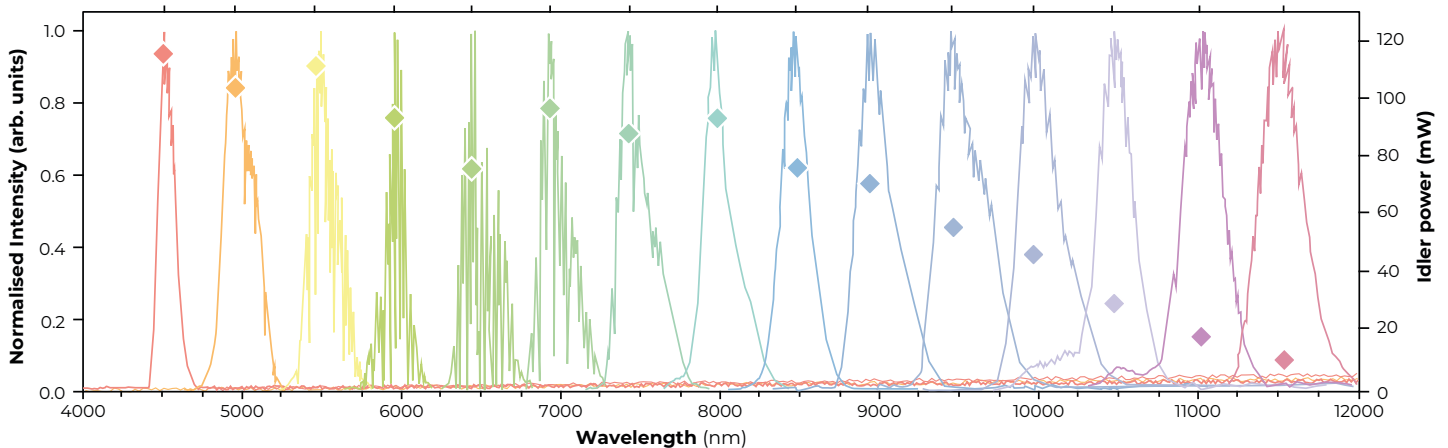
# Chromacity Haskeir

Tunable Long Wavelength IR (LWIR) Laser Source

## Specifications

<b>Output wavelength</b>	Output across 4.5 - 12 $\mu\text{m}$ available (2000 $\text{cm}^{-1}$ – 850 $\text{cm}^{-1}$ )
<b>Output power</b>	Up to 100 mW at 4.5 - 7 $\mu\text{m}$ and up to 20 mW at 11 $\mu\text{m}$
<b>Crystal specifications</b>	Quasi-phase matching crystal design: Wavelength tuning via multi-grating (discrete) or fan-out (continuous) structures
<b>Pump source</b>	Integrated 1040 pump source (Access to depleted 1040 pump on request)
<b>Repetition frequency</b>	100 MHz (Optional 200 MHz available)
<b>Control interface</b>	Ethernet, and web page. Serial port (for control via LabView/MatLab)
<b>Dimensions</b>	970 x 245 x 82 mm (laser head); 483 x 285 x 86 mm (control unit)
<b>Weight</b>	16 kg (laser head); 2 kg (control unit)
<b>Electrical</b>	Voltage 110 – 240 V AC; Frequency 50 – 60 Hz, Power 80 W
<b>Cooling</b>	Air cooled - no water cooling required

## Representative Idler Output



Representative instantaneous bandwidth as the OPO is tuned across its full range.

Water absorption lines can be observed across the 5.5 – 7.5  $\mu\text{m}$  range.

Chromacity follows a policy of continuous improvement, therefore, specifications are subject to change without notice.

Learn how our ultrafast lasers can enable you to discover more.  
For more information, email: [sales@chromacitylasers.com](mailto:sales@chromacitylasers.com)

**DANGER - INVISIBLE LASER RADIATION**  
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION  
CLASS 4 LASER PRODUCT

