

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

Representative Idler Output

