

Chromacity Mid-IR OPO

Broadband mid-IR source



The **Chromacity Mid-IR OPO** delivers discrete broad bandwidths of high brightness coherent light across the important 5 – 12 μm fingerprint spectral region.

01 Applications

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

02 Features

- Tunability across 5 – 12 μm
- Output power:
 - Up to 100 mW at 5 - 7 μm
 - Up to 20 mW at 12 μm
- Quasi-CW, providing instantaneous broad bandwidth spectra
- 100 or 200 MHz repetition frequency available

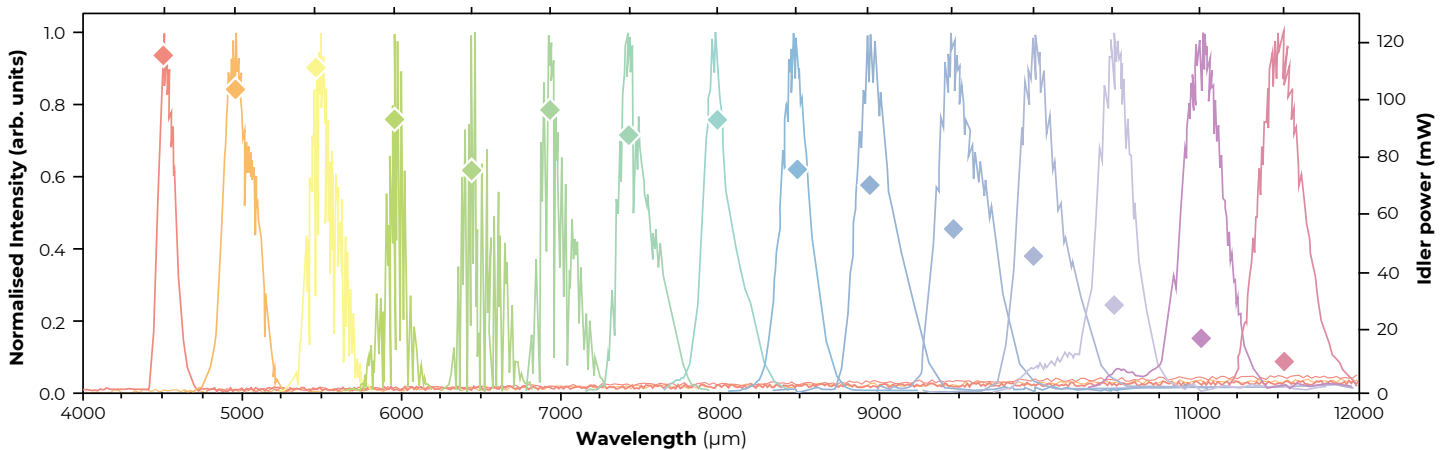
03 Ease of Use

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

Specifications

Output wavelength	Output across 5-12 μm available (2000 cm^{-1} – 833 cm^{-1})
Output power	Up to 100 mW at 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 - Monitor photodiode (Optional 200 MHz available)
Control interface	Ethernet, and web page. Serial port (for basic 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



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

Water absorption lines can be observed across the 5.5 – 7.5 μm 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

