

### DESCRIPTION

The Chromacity Haskeir is a mid-IR tuneable picosecond pulse laser. It consists of a fully integrated 1040nm pump source and optical parametric oscillator (OPO) delivering broad bandwidth coherent light across the 4.5 $\mu\text{m}$  – 12 $\mu\text{m}$  spectral region (2200 $\text{cm}^{-1}$  – 850 $\text{cm}^{-1}$ ). The output pulses are typically <3ps.

The Chromacity Haskeir has a single free-space output covering the 4.5 $\mu\text{m}$  – 12 $\mu\text{m}$  spectral region. The 1040nm pump source is also optionally available to the user combined with the main output.

The fully integrated pump, OPO and amplifier comes with an accompanying PSU, simplifying placement in a typical laboratory environment.

### FEATURES

- Tuneable 4.5 $\mu\text{m}$  – 12 $\mu\text{m}$  centre wavelength
- Pulse duration <3ps typ.
- Average Output power
  - 4.5 $\mu\text{m}$  – 7.5 $\mu\text{m}$ : 110mW to 90mW typ.
  - 8 $\mu\text{m}$  – 12 $\mu\text{m}$ : 90mW to 10mW typ.
  - 1040nm: >2W typ.
- Repetition rate 200MHz
- Beam diameter 1.2mm

### APPLICATIONS

- Interrogation of photonics integrated circuits
- FTIR based stand-off detection
- Multi-species gas analysis
- Telecoms and quantum research
- Material characterisation
- Explosive detection

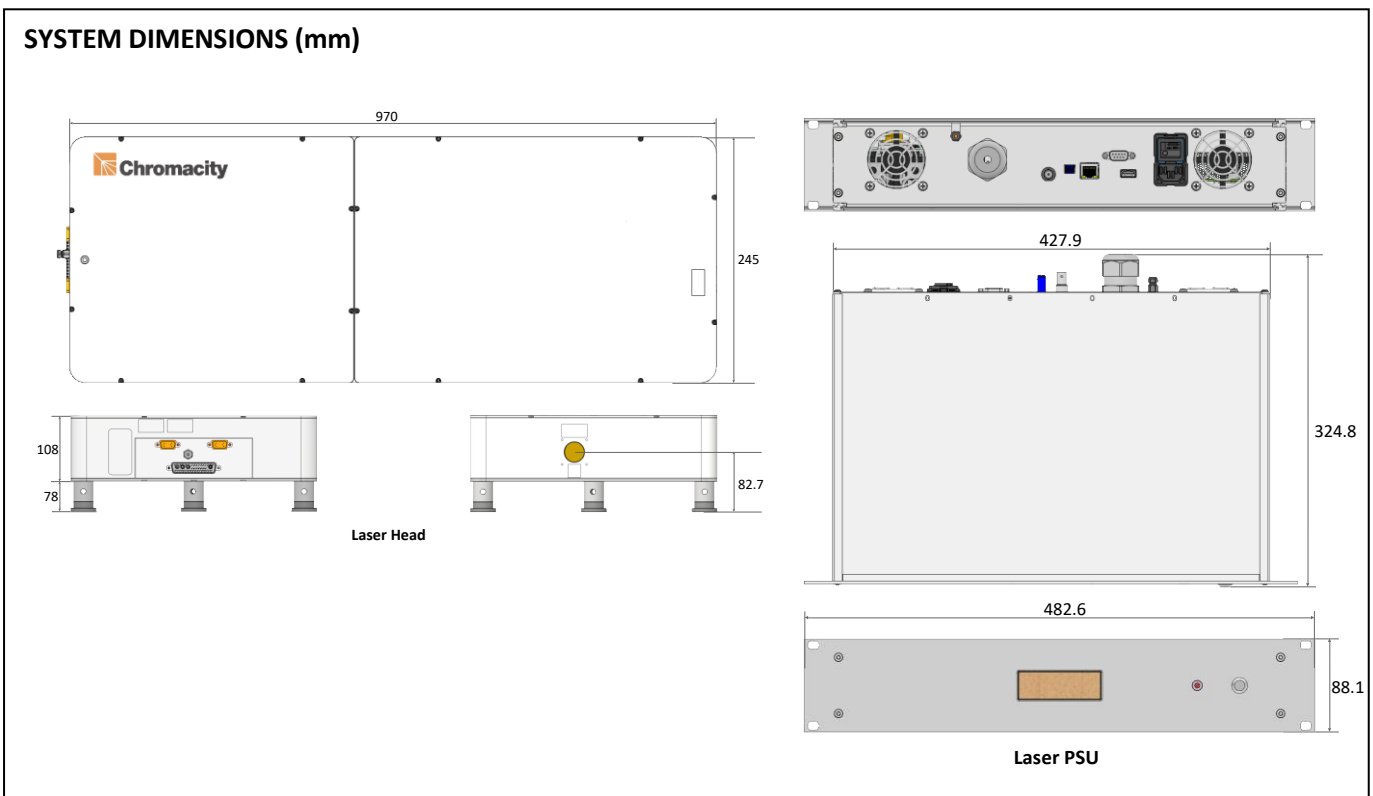


## Tuneable Mid-IR Picosecond Pulse Laser

### SPECIFICATIONS

Parameter	Specification
Central Wavelength	Tuneable 4.5µm – 12µm
Pulse Width	<3ps typ. (<5ps max)
Repetition Rate	200MHz
Average Power	<ul style="list-style-type: none"> <li>4.5µm – 7.5µm: 110mW to 90mW typ.</li> <li>8µm – 12µm: 90mW to 10mW typ.</li> <li>1040nm: &gt;2W typ.</li> </ul>
Output Polarisation	Linear
Beam Diameter	1.2 mm, ±0.2 mm (at exit of laser)
Beam Pointing Stability	<20µrad/°C
Long Term Power Stability	<5% (24h) typ.
Laser settings and functions	Web browser via Wi-Fi, Ethernet or RS-232
Laser diagnostics	Available from PC
Operating Temperature	21°C, ±3°C
System Options	Combined idler and pump beam output, fibre coupling

### SYSTEM DIMENSIONS (mm)



### CONTACT

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