

# Chromacity Auskerry

Tunable IR Laser Source

The **Chromacity Auskerry** is a tunable picosecond light source. The optical parametric oscillator (OPO) delivers broad bandwidth coherent light across the  $1.4\ \mu\text{m} - 4.2\ \mu\text{m}$  ( $7150\text{cm}^{-1} - 2400\text{cm}^{-1}$ ) spectral region.



## 01 Applications

- Interrogation of photonics integrated circuits
- FTIR / stand-off detection
- Multi-species gas analysis
- Telecoms / Quantum research
- Material characterisation
- Explosive detection

## 02 Technical Overview

- Average powers:
  - up to 850 mW (signal)
  - up to 350 mW (idler)
- Pulse durations: ~1-5 ps
- 100 MHz repetition frequency

## 03 Features & Benefits

- Compact laser housing with an integrated pump source
- Coherent beam with broadband coverage
- An intuitive web browser interface
- Remote installation capability



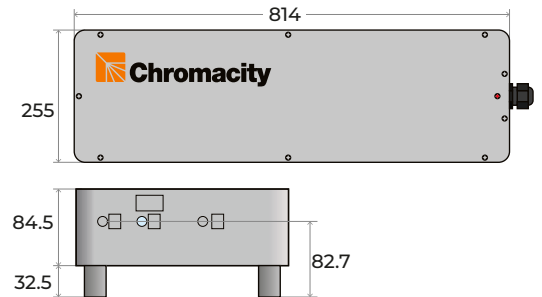
Tunability and high average power enables a broad range of spectroscopic and sensing applications.

## Specifications

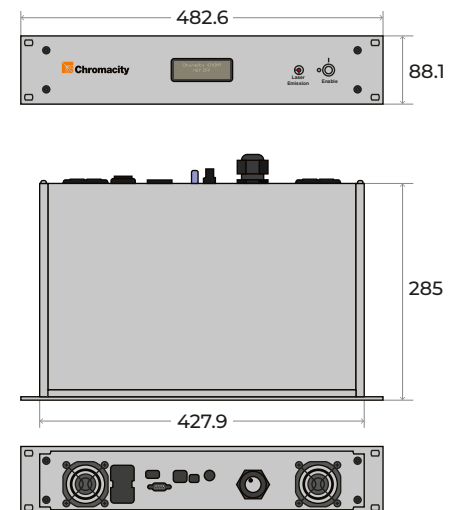
<b>Signal wavelength</b>	1.4 $\mu\text{m}$ – 1.8 $\mu\text{m}$
<b>Signal average power</b>	Up to 850 mW (@ 1.5 $\mu\text{m}$ ) and > 350 mW across the range
<b>Idler wavelength</b>	2.4 $\mu\text{m}$ – 4.2 $\mu\text{m}$
<b>Idler average power</b>	Up to 350 mW (@ 3.3 $\mu\text{m}$ ) with > 200 mW across the range
<b>Repetition frequency</b>	100 MHz
<b>Residual pump power (@ 1040 nm)</b>	> 300 mW (depending on OPO wavelength)
<b>Beam diameter</b>	Signal: 1 – 2 mm Idler: 3 – 6 mm
<b>Control interface</b>	Web browser interface Ethernet & serial port (RS232) also available
<b>Electrical</b>	Voltage 110 – 240 V AC Frequency 50 – 60 Hz Power 80 W
<b>Dimensions</b>	814 x 255 x 117 mm (laser head) 483 x 285 x 86 mm (control unit)

## System Dimensions (mm)

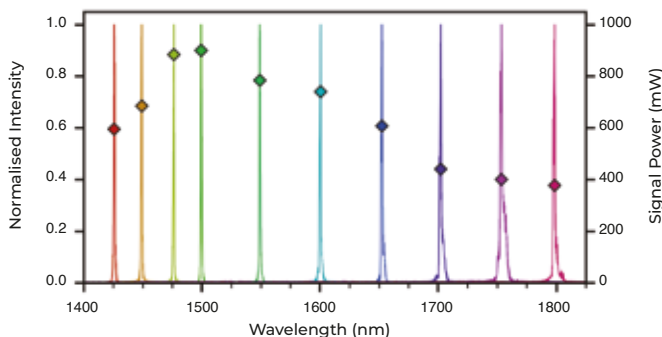
### Laser Head



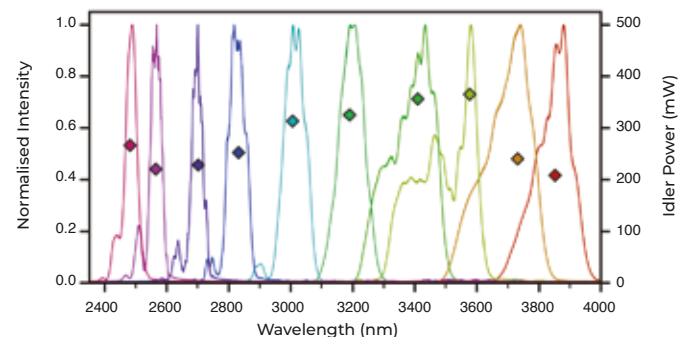
### Power Supply



## Representative Signal Spectral Bandwidths



## Representative Idler Spectral Bandwidths



Representative signal and idler bandwidths are available on request - please get in touch if you have a specific requirement. Chromacity follows a policy of continuous improvement, hence 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)

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CLASS 4 LASER PRODUCT

