

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

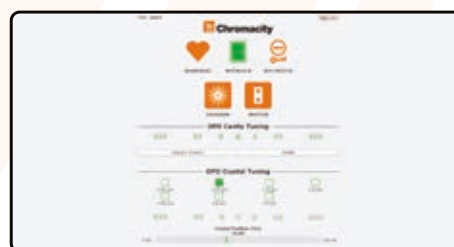
- Interrogation of photonics integrated circuits
- FTIR / stand-off detection
- Multi-species gas analysis
- Telecoms / Quantum research
- Material characterisation
- Explosive detection

02 Technical Overview

- Average powers:
 - up to 850 mW (signal)
 - up to 350 mW (idler)
- Pulse durations: $\sim 1\text{-}5\ \text{ps}$
- 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.

Chromacity Auskerry

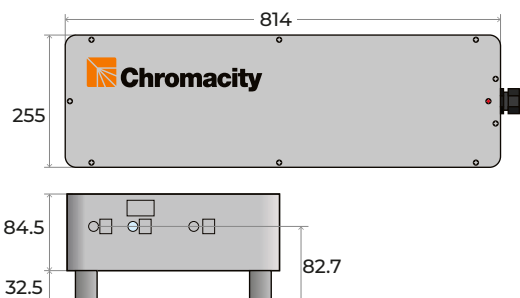
Tunable IR Laser Source

Specifications

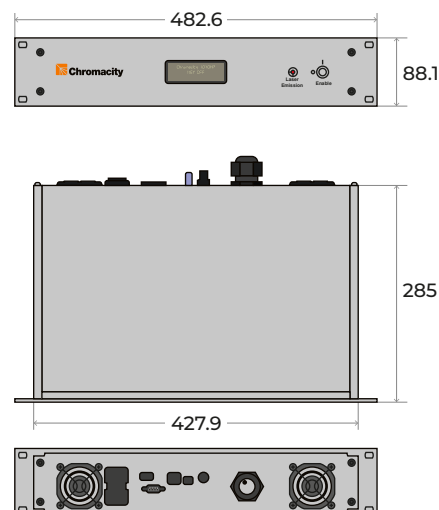
Signal wavelength	1.4 μm – 1.8 μm
Signal average power	Up to 850 mW (@ 1.5 μm) and > 350 mW across the range
Idler wavelength	2.4 μm – 4.2 μm
Idler average power	Up to 350 mW (@ 3.3 μm) with > 200 mW across the range
Repetition frequency	100 MHz
Residual pump power (@ 1040 nm)	> 300 mW (depending on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

System Dimensions (mm)

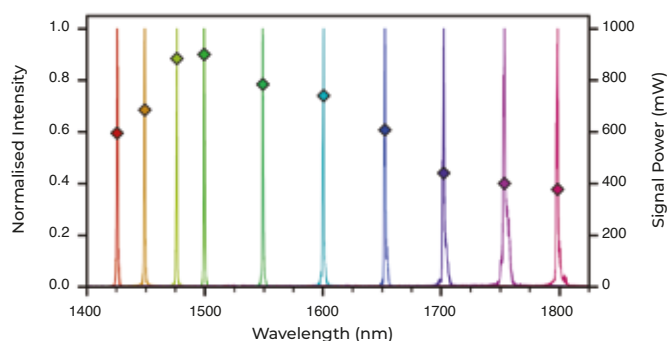
Laser Head



Power Supply



Representative Signal Spectral Bandwidths



Representative Idler Spectral Bandwidths

