



### DESCRIPTION

The Chromacity 920 is an air-cooled, compact, ultrafast neodymium fibre-based laser providing exceptional performance with turnkey operation. With high average power, outstanding pulse quality and power stability, the 920 is an ideal laser source for biological imaging and quantum applications.

The 920 laser is ultra-stable across temperature and time, offering repeatable pulse power, pulse-to-pulse and over extended periods of operation. The laser is designed to be installed remotely and does not require specialist expertise to operate.

The Chromacity 920 laser comes with a laser head and a separate external power supply unit (PSU) providing flexible placement options.

The Chromacity 920 is controlled using an intuitive web browser user interface using ethernet or Wi-Fi, or via an RS-232 serial port, providing easy integration into OEM equipment, or remote operation on the bench in a typical laboratory environment.

### FEATURES

- 920nm centre wavelength
- Pulse duration <150fs max.
- Average output power 1.1W typ.
- Repetition rate 80MHz
- Peak power 110kW typ. (80MHz, 150fs, 1.5W)
- Pulse energy 14nJ (80MHz, 150fs, 1.1W)
- Beam diameter 2.0mm

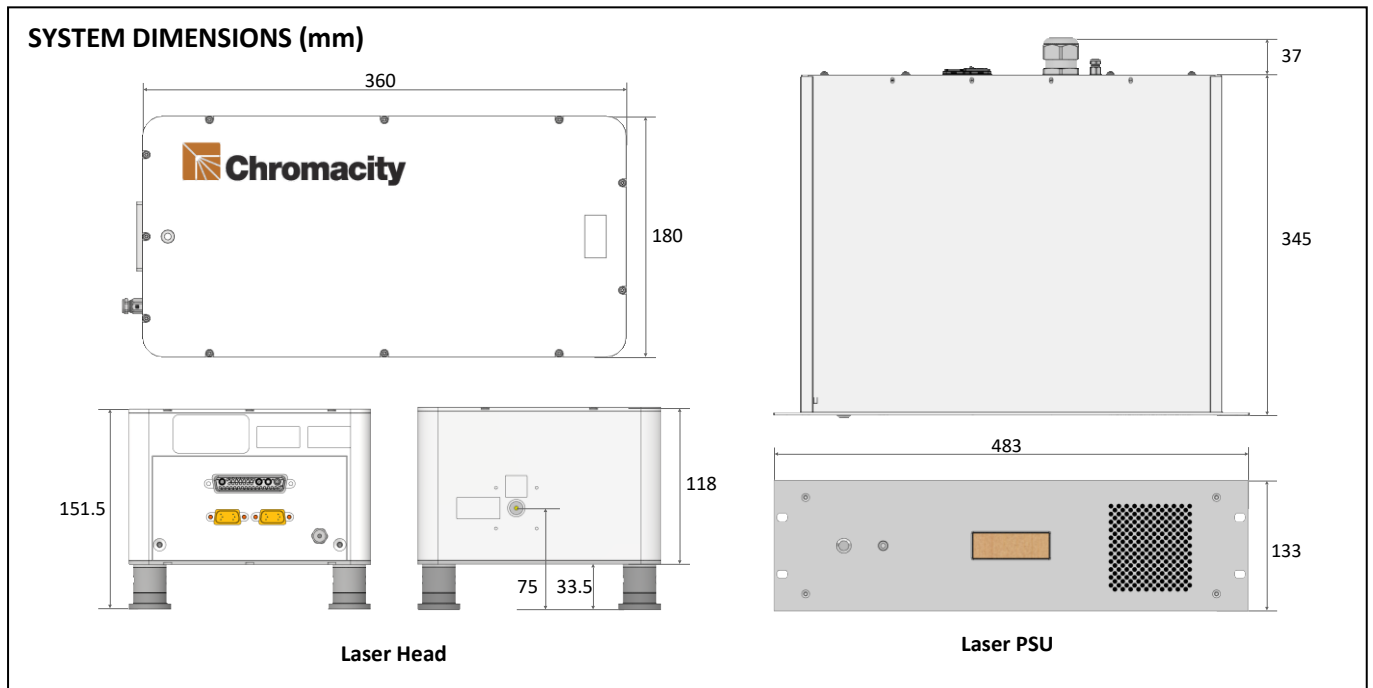
### APPLICATIONS

- Multi-photon microscopy
- SHG microscopy
- Light sheet microscopy
- Time-resolved Photoluminescence Spectroscopy
- FLIM
- THz generation
- Optogenetics
- Pump source for nonlinear optics



### SPECIFICATIONS

Parameter	Specification
Central Wavelength	920nm, FWHM ~20nm
Pulse Width	<150 fs max.
Repetition Rate	80MHz
Average Power (Factory Option)	1.1W typ.
Spatial Beam Profile	Single mode
Pulse Energy	19nJ (80MHz, 150fs, 1.5W)
Output Polarisation	Linear
Beam Quality ( $M^2$ )	<1.1, <1.2 max.
Beam Divergence	<0.4mrad typ.
Beam Diameter ( $1/e^2$ )	2.0mm, $\pm 0.2$ mm (at exit of laser)
Beam Ellipticity	>0.9 typ.
Beam Pointing Stability	<20 $\mu$ rad/ $^{\circ}$ C
Relative Intensity Noise (r.m.s 6Hz – 3MHz)	<0.15% typ.
Long Term Power Stability	<0.5% (100h)
Laser Settings and Functions	Web browser via Wi-Fi, Ethernet or RS-232
Laser Diagnostics	Available from PC
Operating Temperature for Specified Performance	21 $^{\circ}$ C, $\pm 3^{\circ}$ C
System Options	GDD Pre-Compensation: +10,000fs <sup>2</sup> to -50,000fs <sup>2</sup>



**CONTACT**

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