# Chromacity 1040
## Ultrashort pulses at 1040 nm

The **Chromacity 1040** is an air-cooled, compact ultrafast laser.

## 01 Applications

- SHG and multi-photon microscopy
- Light sheet microscopy
- Optogenetics imaging experiments
- Pump source for non-linear optics (OPOs, SHG)
- THz generation
- Supercontinuum generation
- Time resolved experiments (e.g. TCSPC/FLIM)

## 02 Technical Overview

- Up to 4 W average power is available (500 kW peak power)
- Pulse duration: < 150 fs (Chirped output pulse option also available)
- 100 MHz repetition frequency (other repetition frequencies are available)

## 03 Features & Benefits

- Compact laser housing (air-cooled operation)
- Intuitive web browser interface
- Power efficient laser cavity (low power consumption)

## 04 Stable Performance



### Discover More
chromacitylasers.com

sales@chromacitylasers.com
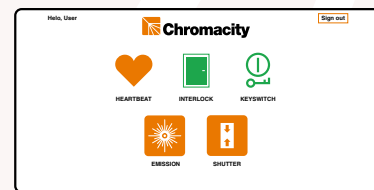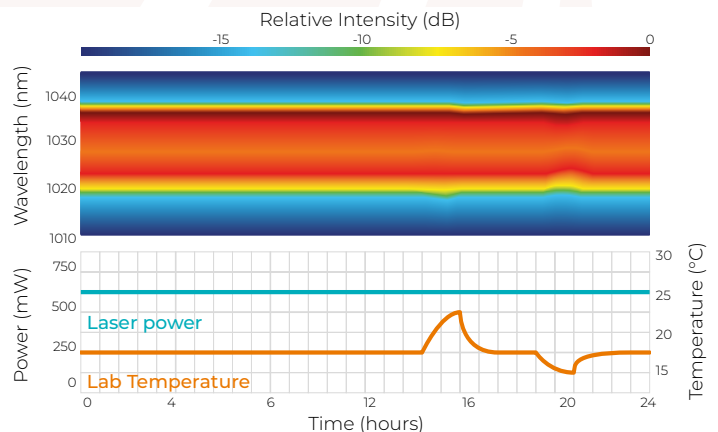
# Chromacity 1040
## Ultrashort pulses at 1040 nm

| Specifications | Low power | Medium power | High power |
|---|---|---|---|
| **Output power** | Up to 500 mW | 2.5 W | > 3.5 W |
| **Wavelength** | 1030 nm | 1040 nm | 1040 nm |
| **Pulse energy** | 5 nJ | 25 nJ | > 35 nJ |
| **Pulse duration** | < 150 fs | | |
| **Repetition frequency** | 100 MHz | | |
| **Beam parameters** | Free space, M² < 1.2, Linearly polarized Divergence < 2 mrad | | |
| **Beam diameter** | 0.5 - 1.2 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** | 426 x 250 x 108 mm (laser head) 483 x 285 x 88 mm (control unit – 19" 2U rack mount) | | |

## System Dimensions (mm)

Laser Head



108
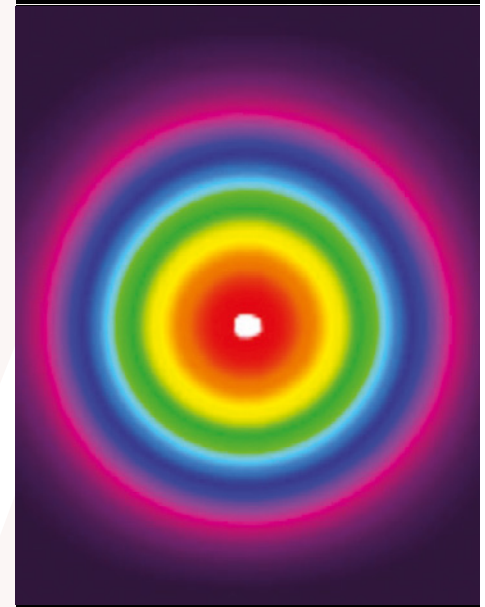71
78
426
250

Power Supply

482.6
88.1
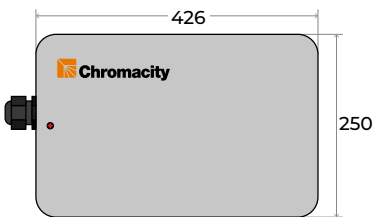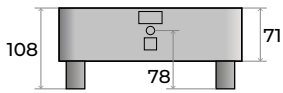
## Autocorrelation Measurement
Indicating pulse duration of 130 fs



**Delay** (fs)
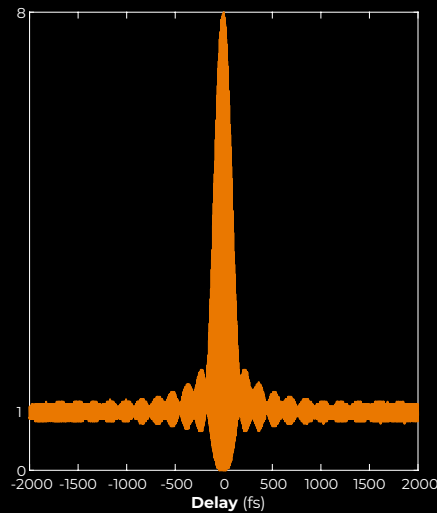
## Beam Profile



Customized specifications are often requested – 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**

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