

# Chromacity 1040

Ultrashort pulses at 1040 nm



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

## 01 Applications

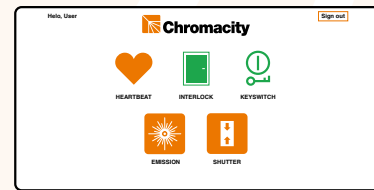
- SHG and multi-photon microscopy
- Light sheet microscopy
- Optogenetics imaging experiments
- Pump source for non-linear optics (OPOs, SHG)
- THz generation
- Supercontinuum generation
- Time resolved experiments (e.g. TCSPC/FLIM)

## 02 Technical Overview

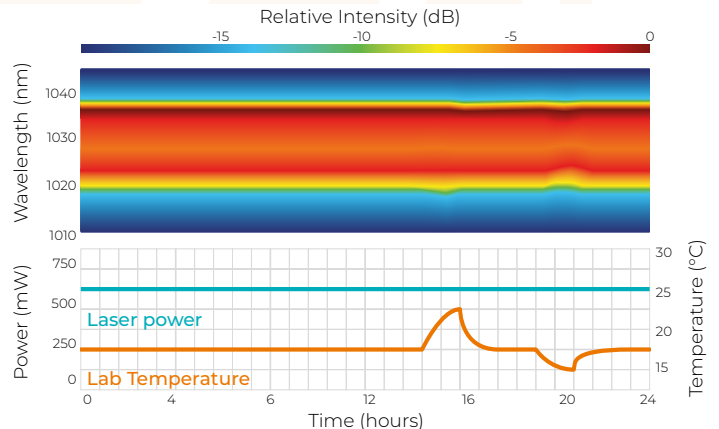
- Up to 4 W average power is available (500 kW peak power)
- Pulse duration: < 150 fs (Chirped output pulse option also available)
- 100 MHz repetition frequency (80 MHz also available)

## 03 Features & Benefits

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



## 04 Stable Performance



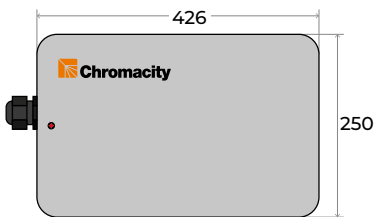
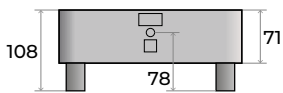
# Chromacity 1040

Ultrashort pulses at 1040 nm

Specifications	Low power	Medium power	High power
<b>Output power</b>	Up to 750 mW	2.5 W	> 3.5 W
<b>Wavelength</b>	1030 nm	1040 nm	1040 nm
<b>Pulse energy</b>	7.5 nJ	25 nJ	> 35 nJ
<b>Pulse duration</b>	< 150 fs		
<b>Repetition frequency</b>	100 MHz		
<b>Beam parameters</b>	Free space, $M^2 < 1.3$ , Linearly polarized Divergence < 2 mrad		
<b>Beam diameter</b>	0.5 - 1.2 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>	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

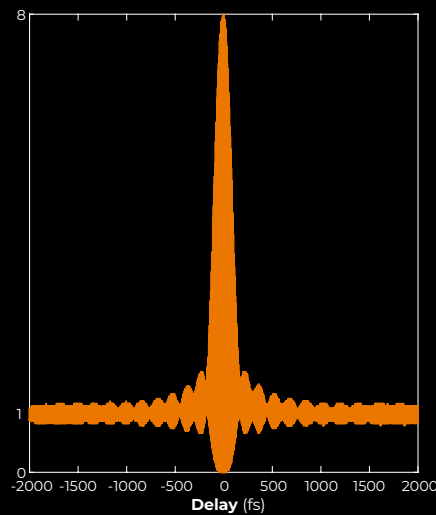


Power Supply

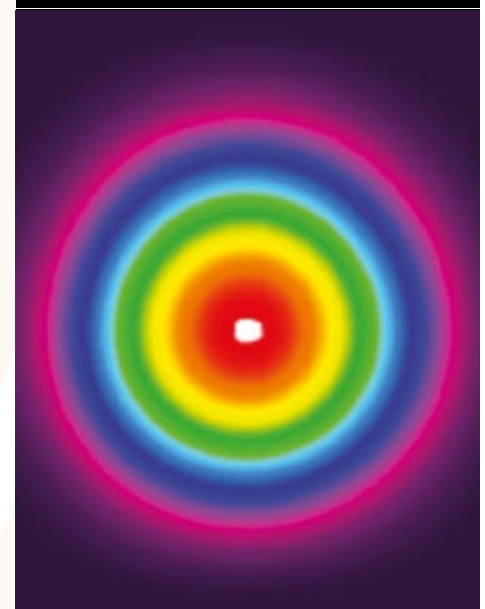


## Autocorrelation Measurement

Indicating pulse duration of 130 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.

[www.gmp.ch](http://www.gmp.ch)

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