

Chromaticity 1040

Ultrashort pulses at 1040 nm



The **Chromaticity 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

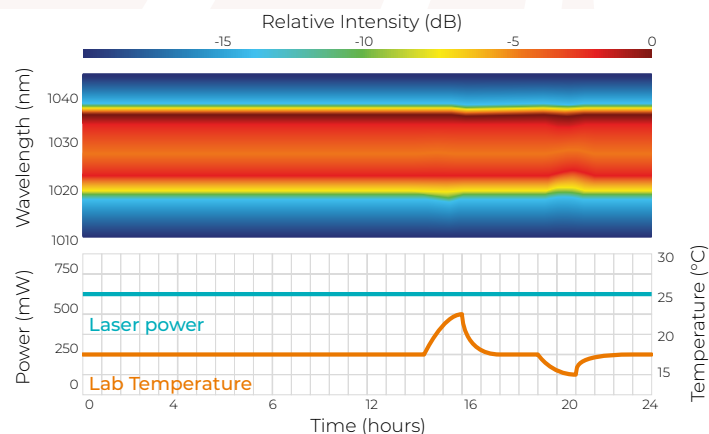
- Up to 4 W average power is available (500 kW peak power)
- Pulse duration: < 150 fs (Chirped output pulse option also available)
- 100 MHz repetition frequency (other repetition frequencies are available)

03 Features & Benefits

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



04 Stable Performance



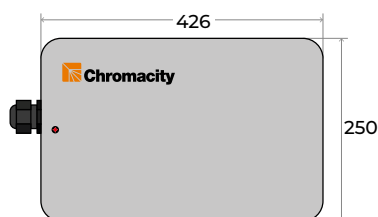
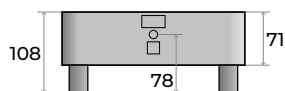
Chromacity 1040

Ultrashort pulses at 1040 nm

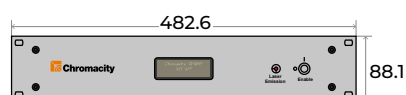
Specifications	Low power	Medium power	High power
Output power	Up to 500 mW	2.5 W	> 3.5 W
Wavelength	1030 nm	1040 nm	1040 nm
Pulse energy	5 nJ	25 nJ	> 35 nJ
Pulse duration	< 150 fs		
Repetition frequency	100 MHz		
Beam parameters	Free space, $M^2 < 1.2$, Linearly polarized Divergence < 2 mrad		
Beam diameter	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

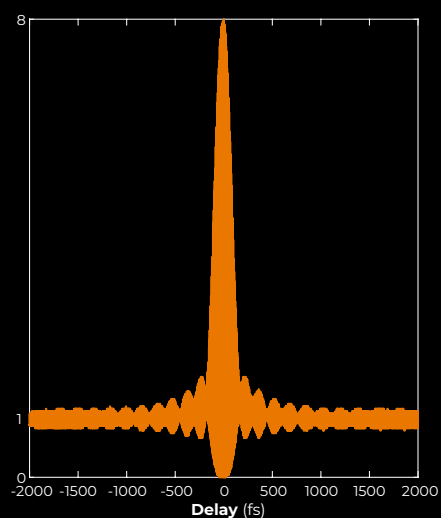


Power Supply



Autocorrelation Measurement

Indicating pulse duration of 130 fs



Beam Profile

