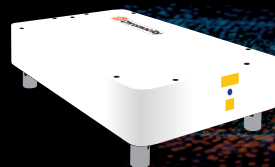
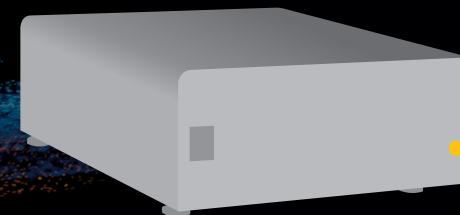




# Comparison Matrix



Chromacity 1040



Ti:Sapphire

<b>Wavelength</b>	Fixed 1040 nm*	<input checked="" type="checkbox"/> <b>Tunable</b> <b>Typically 680 nm - 1080 nm</b>
<b>Maximum average power</b>	<input checked="" type="checkbox"/> <b>Up to 4 W</b>	Typically 1.5 W or less
<b>Maximum peak power</b>	<input checked="" type="checkbox"/> <b>&gt;300 kW**</b>	Typically > 150 kW at 800 nm <100 kW at 1040 nm
<b>Pulse duration</b>	<150 fs (ideal for managing dispersion through microscope optics)	<input checked="" type="checkbox"/> <b>&lt;70 fs (pulse break-up through microscope objective lens can occur)</b>
<b>Repetition frequency</b>	<input checked="" type="checkbox"/> <b>50 MHz to 200 MHz available</b> (factory set)	Typically 80 MHz
<b>Optical alignment</b>	<input checked="" type="checkbox"/> <b>Not required (Fiber technology)</b>	Required Complex and time-consuming
<b>Beam parameter (M<sup>2</sup>)</b>	< 1.2	Typically <1.2
<b>Footprint (size/weight)</b>	<input checked="" type="checkbox"/> <b>Compact, light: suitable for both lab and industrial applications</b>	Bulky, heavy: more suitable for lab applications
<b>Cooling system</b>	<input checked="" type="checkbox"/> <b>Air cooling</b>	Water cooling
<b>Installation</b>	<input checked="" type="checkbox"/> <b>'Plug and play' technology</b> <b>Minimal set-up required (hours)</b>	Complex set-up (days)
<b>Cost efficiency</b>	<input checked="" type="checkbox"/> <b>Low ownership, running and maintenance costs</b>	Higher ownership and recurring maintenance costs

Superior Performance

\*Wavelength 1030 nm for Low Power version (1040 nm for mid and high power versions)

\*\* for repetition frequency at 100 MHz

## Discover More

[chromacitylasers.com/ultrafast-lasers/chromacity-1040/](https://chromacitylasers.com/ultrafast-lasers/chromacity-1040/)

“The Chromacity 1040 is a fantastic turn-key system that takes up a surprisingly small footprint on the optical bench. After a decade of working with Ti:Sapphire lasers, having such a reliable femtosecond laser is a delight”