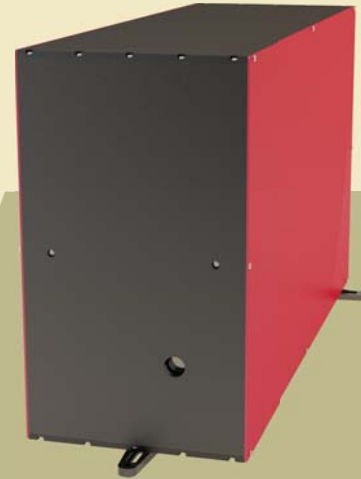




### Tourmaline TETA Yb Femtosecond Amplifier

- Extra-small footprint
- Rigid design
- Compact single-box solution
- More than 150  $\mu\text{J}$ /pulse
- <300 fs pulse duration
- High beam quality
- Excellent beam pointing and long term power stability



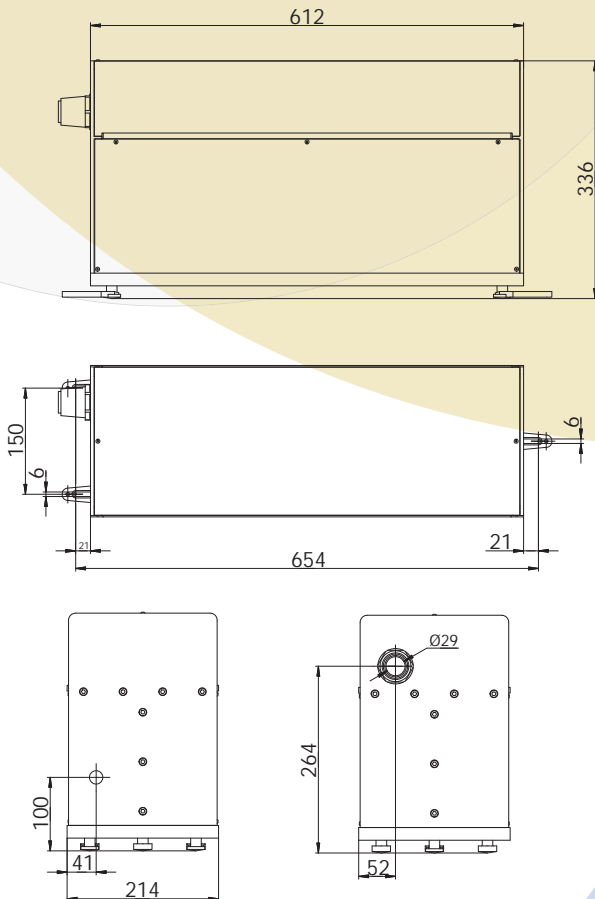
Tourmaline Yb amplifier system

#### Product overview

The Tourmaline TETA femtosecond amplified laser system comprises a fiber seed oscillator, Pockels cells with a control and synchronization unit, and a diode-pumped regenerative amplifier. All the components are integrated into a single box providing increased stability and trouble-free operation. The additional built-in Pockels cell offers instant output radiation shuttering as well as total user control of output repetition rate. Moreover, the cell features precise pulse picking with control over the number of fired pulses (burst mode) and temporal period of radiation.

The Tourmaline TETA laser system is a reliable and flexible radiation source for femtosecond micromachining systems, terahertz imaging, OPA pumping, remote sensing and ultrafast spectroscopy.

#### Tourmaline TETA technical specifications



	TETA-X
Pulse repetition rate, kHz	1-20*
Output pulse energy, $\mu\text{J}$	>150 @ 1 kHz (TETA-1) >100 @ 10 kHz (TETA-10) >50 @ 20 kHz (TETA-20)
Pulse duration, fs	<300
Central wavelength (fixed), nm	1028+/-2
$M^2$	<1.3
Beam diameter ( $1/e^2$ ), mm	5
Stability, % rms	<1.5
Contrast ratio	>10 <sup>3</sup> :1 @ 10 ns >10 <sup>3</sup> :1 @ 1 ps >10 <sup>6</sup> :1 @ 5 ps >5x10 <sup>7</sup> :1 @ 10-20 ps >5x10 <sup>7</sup> :1 @ ASE
Spatial mode	TEM <sub>00</sub>
Output polarization	vertical
Dimensions, (WxLxH) mm	214x612x336
Cooling	The package includes closed-loop water chiller
* - please specify with order	