

# 1-Micron Illuminator Laser Sparkle Optics Corporation

- 1030 nm Laser Wavelength
- High Pulse Energy and Peak Power
- TEM<sub>00</sub> and Polarized
- Scalable to 1 kW average power

<b>Standard Specifications</b>			
	<b>Unit</b>	<b>1030-Q-100</b>	<b>1030-Q-200</b>
<b>Wavelength</b>	nm	1030	1030
<b>Average Power (max)</b>	W	100	200
<b>Pulse Energy (max)</b>	mJ	14	14
<b>Peak Power (max)</b>	kW	>500	>500
<b>Beam quality</b>		TEM <sub>00</sub> , M <sup>2</sup> < 1.2	TEM <sub>00</sub> , M <sup>2</sup> < 1.2
<b>Pulse repetition rate</b>	kHz	5-100 kHz	5-100 kHz
<b>Pulsewidth</b>	ns	< 30 ns at <10 kHz	< 30 ns at <10 kHz
<b>Polarization</b>		Horizontally polarized, >150:1	Horizontally polarized, >150:1
<b>Beam diameter (2w)</b>	mm	1 (typical), configurable	1 (typical), configurable
<b>Laser Head</b>	inch	18 w x 17 d x 7 h	18 w x 17 d x 7 h
<b>Laser Power Supply</b>	inch	17 w x 32 d x 16 h (enclosure)	17 w x 32 d x 16 h (enclosure)
<b>Electrical Input</b>		220 VAC, single-phase, 50-60 Hz	220 VAC, single-phase, 50-60 Hz
<b>Water</b>	liter / min	4	4
<b>Helium gas (balloon grade)</b>	liter / min	0.3	0.3
<b>Laser can be custom built to customer requirements</b>			

## **Applications:**

- Beacon Illuminator
- Nonlinear optics pump for Track Illuminator
- Laser Illumination
- Lidar
- Deep Space Communication