

ILC Series

Pulsed Laser Modules



DESCRIPTION

The Power Technology ILC Pulser series delivers a high-performance lineup of pulsed laser diode modules. Offering numerous wavelengths from 465 nm to 1550 nm, peak pulse powers from 1.5 W to 150 W, and pulse energies from 6.4 nanojoules to 45 microjoules; these pulsed laser modules are designed for versatility, precision, and reliability across a variety of applications. Features include tight pulse-to-pulse power consistency with $\pm 0.5\%$ drift per $^{\circ}\text{C}$, as well as optional collimating optics to deliver optimized beam profiles. The ILC's compact design offers easy integration for diverse applications. Additionally, the ILC offers adjustable pulse width, rate, and power for flexible use.

APPLICATIONS

- Range Finding
- Remote Sensing & Detection
- Laser Guidance
- Weapons Systems
- Communications
- Biomedical
- Lithography

FEATURES & BENEFITS

- Compact Design
- High Stability
- Customizable Pulse Parameters
- Enhanced Versatility
- Optional Collimating Optics

SPECIFICATIONS

ILC Models	ILC 465 E797	ILC 638 E798	ILC 670 E799	ILC 850 E800	ILC 850 E804	ILC 905 E805	ILC 905 E810	ILC 1064 E811	ILC 1550 E812	ILC 1550 E816
Wavelengths (nm)	465	638	670	850*	850*	905*	905*	1064	1550*	1550*
Peak Pulse Power (W)	20	1.5	10	4.0	100	4.0	150	1.5	5.0	60
Min Pulse Energy (nJ)	170	6.4	40	16	400	16	600	6.4	20	240
Max Pulse Energy (μJ)	6.0	0.48	3.0	1.2	30	1.2	45	0.48	1.5	18
Pulse Width (ns)**	8-300	4-300	4-300	4-300	4-300	4-300	4-300	4-300	4-300	4-300
Pulse Rep Rate (kHz)**	0.1-100	0.1-100	0.1-100	0.1-100	0.1-100	0.1-100	0.1-100	0.1-100	0.1-100	0.1-100
Pulse Rise Time (ns)**	1-40	1-40	1-40	1-10	1-40	1-40	1-40	1-40	1-40	1-40
Pulse Fall Time (ns)**	1-20	1-20	1-20	1-20	1-20	1-20	1-20	1-20	1-20	1-20
Pulse Propagation Delay (ns)	14-22	14-22	14-22	14-22	14-22	14-22	14-22	14-22	14-22	14-22
Supply Voltage (VDC)**	8-30	8-30	8-30	8-30	8-30	8-30	8-30	8-30	8-30	8-30
Supply Current (mA)	80-300	80-300	80-300	80-300	80-300	80-300	80-300	80-300	80-300	80-300
Operating Temperature (°C)	0-50	0-50	0-60	0-80	0-80	0-80	0-80	0-50	0-80	0-80
Module Diameter (mm)***	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4
Module Length (mm)	103	103	103	103	103	103	103	103	103	103
Collimated Beam Option	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available

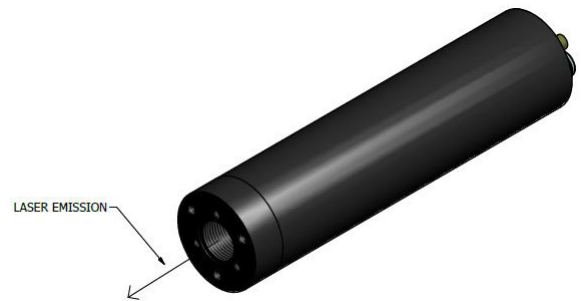
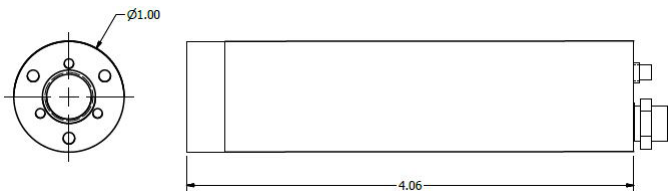
*Additional peak pulse powers are available at this wavelength.

**Pulse Width, Rise/Fall Time, Propagation Delay and Supply Voltage specs list the general capabilities of the ILC Pulser.

Model-specific values depend on the specific laser diode used.

***A 31.75 mm (1.25 in.) diameter version is also available.

MECHANICAL DRAWINGS



SAFETY WARNINGS



COMPLIANT & REGISTERED

