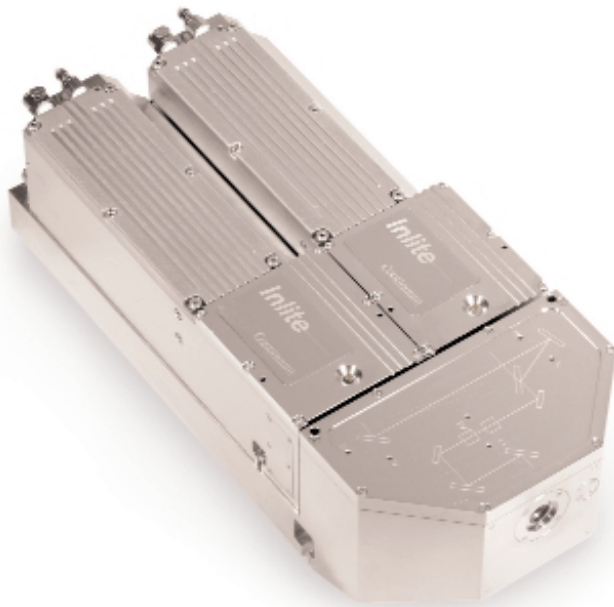


Inlite™ PIV The Ultimate Source for PIV Applications



Inlite PIV System

INLITE PIV FEATURES & BENEFITS

- Monolithic industrial design, built to withstands shock and vibration*
- Tight integration of laser heads and PIV dock for optimal performance*
- Full featured command set and a graphical user interface provide seamless control*
- Unique ability to externally adjust beam overlap*
- Built to last - greater than 50 million shots lamp lifetime, guaranteed*

Inlite PIV - The Ultimate Source for PIV Applications

The Inlite PIV system is a rugged platform for demanding applications. The unique, monolithic PIV docking platform that contains the laser bench and combining optics cavity is made of cast aluminum for optimal resistance to thermal and vibrational stress. The dock can accept any of the family of Inlite lasers, making it the most flexible platform available. The user can reconfigure the Inlite PIV system in the field to shift from 532 nm to 266 nm output, and a separate version is available for 532 nm and 355 nm output in separate beams.

NOTES

1. Full width half max
2. Full angle for 86% ($1/e^2$) of energy
3. At the output coupler
4. With respect to external trigger
5. The first value represents shot-to-shot for 3σ , the second value represents RMS

*Note: Other configurations available, consult the factory for more information

All specifications at 1064 nm unless otherwise noted. As a part of our continuous improvement program, all specifications are subject to change without notice.

DESCRIPTION*	INLITE II		INLITE III	
	PIV II-20	PIV II-50	PIV III-20	PIV III-30
Repetition Rate (Hz)	20	50	20	30
Energy (mJ)				
532 nm	120	80	200	180
355 nm	35	20	50	45
266 nm	25	15	40	30
Pulsewidth ¹ (nsec)				
532 nm	5-7	7-9	5-7	5-7
355 nm	5-7	7-9	5-7	5-7
266 nm	5-7	7-9	5-7	5-7
Divergence ² (mrad)	<0.75	<0.75	<1.5	<1.5
Beam Diameter ³ (mm)	6	6	7	7
Jitter ⁴ (±ns)	0.5	0.5	<1	<1
Energy Stability ⁵ (3σ; ±%)				
532 nm	4.0; 1.3	5.0; 1.6	4.0; 1.3	4.0; 1.3
355 nm	6.0; 2.0	7.0; 2.3	6.0; 2.0	6.0; 2.0
266 nm	8.0; 2.6	9.0; 3.0	8.0; 2.6	8.0; 2.6

Mechanical and Utilities

Size	Optical Head (L x W x H)	444.5 x 193 x 122 mm (17.5 x 7.6 x 4.8 in.)
	Power Supply (L x W x H)	572 x 254 x 432 mm (22.5 x 10 x 17 in.) tower 559 x 432 x 267 mm (22 x 17 x 10.5 in.) rack PIV system includes two power supplies
Weight	Optical Head	13.5 kg (30 lbs)
	Power Supply	30 kg (66 lbs)
Water Service		Closed loop water to air heat exchanger (2 l. deionized water): Closed loop water to external cooling water available
Electrical Service		200 - 240 V 50/60 Hz
Room Temperature		18.3 to 29.4° C (60 to 85° F)
Umbilical Length		3.0 m (9 ft 10 in.)

Accessories

- Harmonics modules for 532, 355, or 266 nm output
- Internal pyro-electric power detectors for IR, harmonics
- External pyro-electric power detector for system loop
- Automated continuously variable attenuator, optical losses reduce energy specifications by 10% except the 1064 nm 50 Hz model, which is 20%.

Tower Power Supply*

All dimensions in mm (inches)

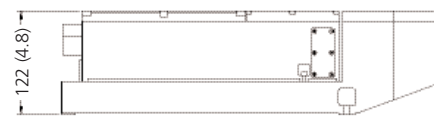
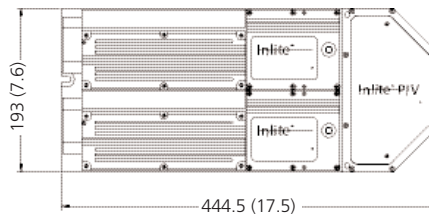
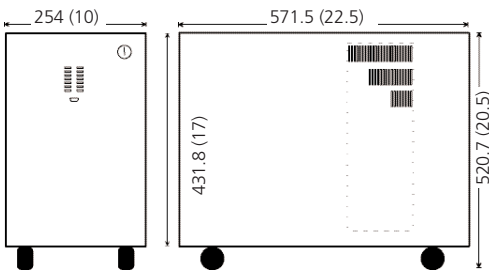
Laser Head Dimensions

All dimensions in mm (inches)

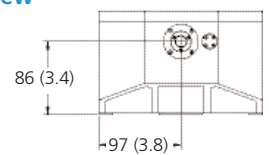
Front View

Side View

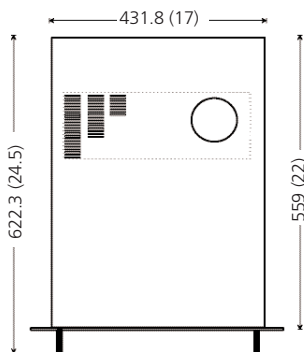
Top View



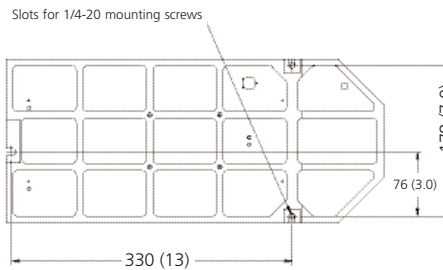
Side View



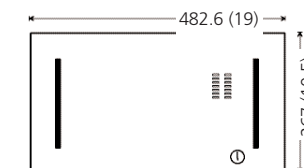
Rack Mount Power Supply*



Top View



Bottom View



Front View

NOTE: Faceplate is 10.5" in height. Body of supply is 10.0" to height, centered on faceplate.

*PIV system includes two power supplies

