

# Flyer 3D Scan Head

Complete 3-axis scan head solution for fast, easy integration



Pair with any Synrad CO<sub>2</sub> laser from 30 - 400 Watts for a large area cutting, engraving, and marking solution.

- Servo-driven z-axis increases field sizes, up to 914 mm x 833 mm (36" x 33") while maintaining small spot sizes for enhanced detail and throughput
- Pre-aligned and calibrated sub-assembly customized to suit your application needs and desired field size
- Easier job setup with built-in diode pointer and adjustable focal plane to accommodate varied part thicknesses and heights
- Intuitive design and control with included WinMark™ Pro software package
- Built-in Ethernet and I/O interfaces allow the scan head to be controlled via computer (tethered) or operate indendently (standalone)
- Static or dynamic tracking modes enable easy integration into a custom processing station or onto full production lines

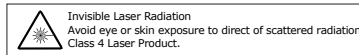


## WinMark™ Pro Software

Custom software designed by Synrad to operate our scan heads. Files can be created in the software itself, or imported from your favorite design software. Each object within the design can be assigned unique parameters to optimize application performance and allow many processes (marking, cutting, engraving, and others) to be performed in a single job file. WinMark can also be used to prepare the scan head for static or dynamic on-the-fly operation.

## Specifications

Performance	
Field Size mm (inches)	269 x 227 to 914 x 833 (10.6 x 8.9) to (36 x 33)
Spot Size 1/e <sup>2</sup> (µm)	165 - 688
Working Distance Range mm (inches)	268 - 1101 (10.5 - 43.3)
Scan Speed, mm/s (inches/s)	7620 (300) - 15240 (600)
Operation	
Operating Temperature Range	0 to 40° C
Humidity	0 - 95%, non-condensing
Electrical Input	48 VDC ± 2.0 VDC, 6.7 A, 20 A Peak
Heat Load, generated by the head	320 W nominal, 400 W max
Inbput Beam Wavelength	9.3 µm - 10.8 µm
Continuous Beam Input Power	500 W
Physical	
Dimensions w/ mounting bracket LxWxH inches (mm)	558 x 191 x 280 (21.9 x 7.5 x 11.1) - all others 580 x 191 x 280 (22.8 x 7.5 x 11.1) - p Series
Weight kg (lbs.)	9.7 (21.45)
Communication	
Tethered: PC control and mark file creation	WinMark, ActiveX
Standalone: allows API, PLC, PC or I/O control	ActiveX, Modbus I/P, Master Control File
I/O	8 inputs/8 outputs Built-in user accessible 15 V power source

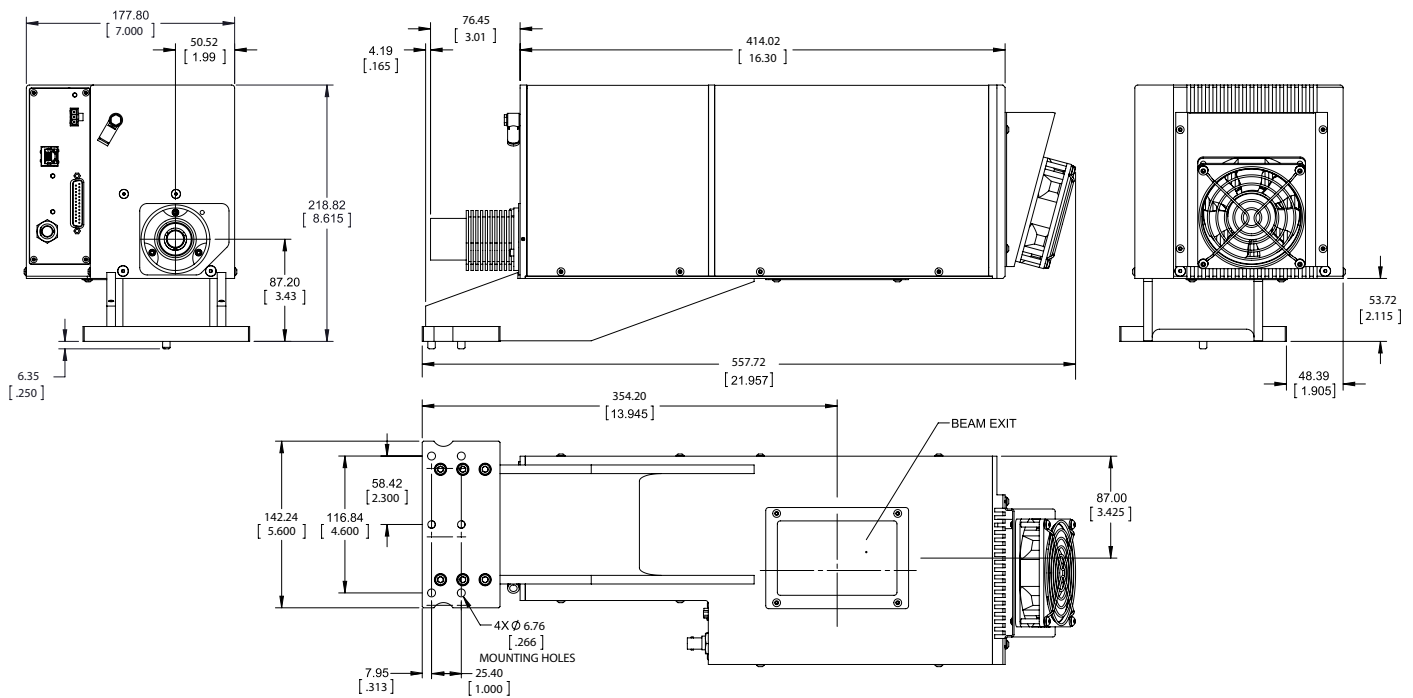


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Technical Illustrations dimension are in mm (inches)



Dimensions Marking head, Synrad CO<sub>2</sub> laser (30 - 400 W) and mounting rail

Dimensions for Flyer 3D System Pairings - mm (inches)							
	v30	ti Series	p100	p150	p250	f201	i401/p400
L	1022.21 (40.24)	1250.01 (49.21)	1272.75 (50.11)	1481.58 (58.33)	1913.28 (75.33)	1913.28 (75.33)	1914.08 (75.36)
W	203.20 (8.00)	241.30 (9.50)	241.30 (9.50)	241.30 (9.50)	355.60 (14.00)	355.60 (14.00)	355.60 (14.00)
H	231.52 (9.12)	231.52 (9.12)	293.24 (11.55)	293.24 (11.55)	263.40 (10.37)	263.40 (10.37)	429.54 (16.91)



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