

DFS14 3D Scan System

Focusing on high-end industrial laser applications



DFS14 System Key Advantages:

- ▶ Extremely low temperature drift - scanner (over 8 hours long-term offset drift⁽³⁾ $\leq 80 \mu\text{rad}$)
- ▶ Dynamic focusing module with extremely high resolution $\leq 0.3 \mu\text{m}$
- ▶ Extremely high speed - scanner (tracking error $\leq 0.16 \text{ ms}$)

Typical Applications:

The DFS14 products incorporate dynamic focusing techniques, offering the smallest focal spot in accordance with a larger processing field and processing ability on 3D applications. DFS14 products are highly suitable for textiles, paper, leather, plastic web, automotive, metalworking and packaging industries, where larger processing area, smallest spot diameters, and 3D applications are crucial.

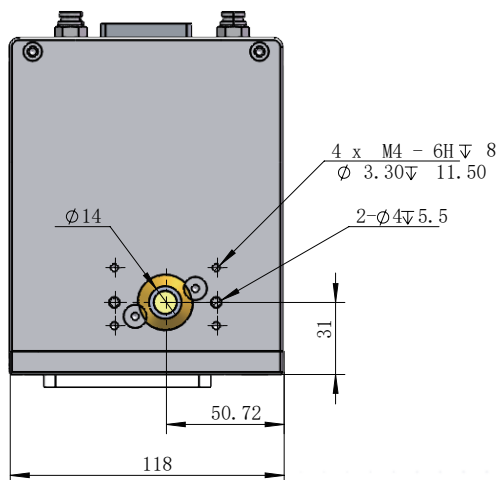
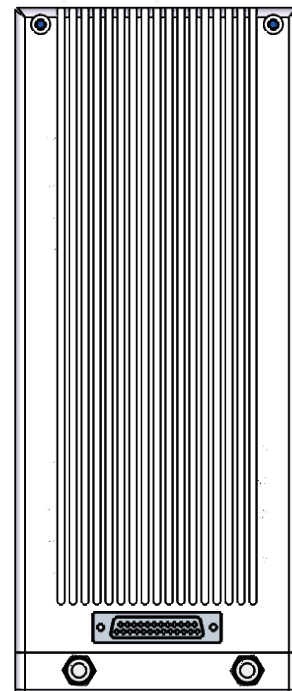
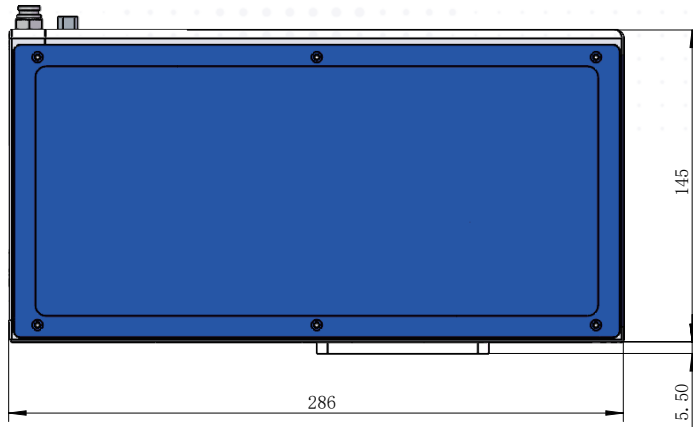
The DFS14 exhibits extremely high dynamic-axis resolution, exceptional focal spot uniformity and great dynamic performance, high precision, low temperature drift and excellent long-term stability.

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Mechanical Drawings (Dimensions in mm)



Specifications DFS14-1.064-W

Scan filed (mm x mm)	450 x 450	500 x 500	600 x 600
Wavelength (nm)	1064		
Entrance Aperture (mm)	8	8	8
Working distance (mm)	550	600	700
Average spot size $1/e^2$ (μm)	83	90	106
Max. laser power CW (W)	300	300	300
for 50% duty cycle (W)	600	600	600

Note:

- (1) Working distance: distance from the lower end of the beam exit side of the scan head to the surface of the work plane.
- (2) $M^2 = 1$
- (3) Long-term temperature drift is given under an ambient temperature environment of 25°C. and a working load under 500W. Temperature drift testing with high laser power is strictly prohibited. High laser power could induce thermal deformations in both the optical and mechanical systems, making it impossible to differentiate whether the drift is originating from galvanometer scanner itself or due to deformations in the optical and mechanical systems.