

# DFS20 3D Scan System

Focusing on high-end industrial laser applications



## DFS20 System Key Advantages:

- ▶ Extremely low temperature drift - scanner (over 8 hours long-term offset drift<sup>(3)</sup>  $\leq 80 \mu\text{rad}$ )
- ▶ Dynamic focusing module with extremely high resolution  $\leq 0.3 \mu\text{m}$
- ▶ Extremely high speed - scanner (tracking error  $\leq 0.28 \text{ ms}$ )

## Typical Applications:

The DFS20 products incorporate dynamic focusing techniques, offering the smallest focal spot in accordance with a larger processing field and processing ability on 3D applications. DFS20 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.

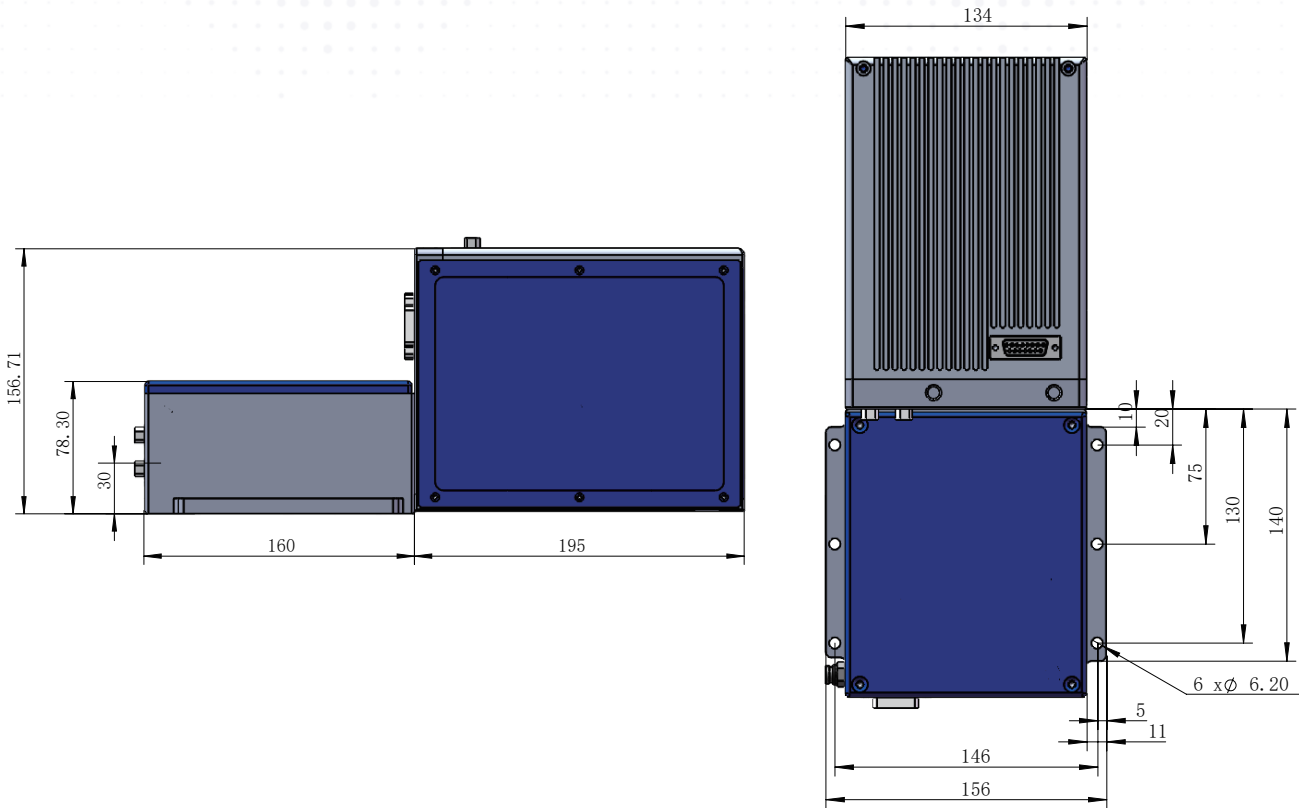
The DFS20 exhibits extremely high dynamic-axis resolution, exceptional focal spot uniformity and great dynamic performance, high precision, low temperature drift and excellent long-term stability.

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## Mechanical Drawings (Dimensions in mm)



## Specifications DFS20-1.064-W

Scan filed (mm x mm)	150 x 150	200 x 200	250 x 250
Wavelength (nm)	1064		
Entrance Aperture (mm)	8	8	8
Working distance (mm)	210	285	370
Average spot size $1/e^2$ ( $\mu\text{m}$ )	30	30	40
Max. laser power CW (W)	500	500	500
for 50% duty cycle (W)	1000	1000	1000

### 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.