

TRS Series

Tyrannosaurus Rex 3D Camera

TRS-050B

Product Overview

- Full-field scan speed up to 3 fps
- Four-projection, no dead spots
- FOV covers $51 \times 51 \times 8$ mm
- Z-axis repeatability to $0.2 \mu\text{m}$



Specifications

Parameter	Value
Model	TRS-050B
Resolution	5120×5120
Scan Range (Z-axis)	8 mm
Mid-field (WD, mm)	51×51 mm (131)
Optimal Working Distance	131 mm
Resolution, XY-axis	$10 \mu\text{m}$
Z-axis Regional Repeatability ⁽¹⁾⁽²⁾	$0.2 \mu\text{m}$
Scan Rate	≤ 3 fps
Optimal Scanning Volume	$51 \times 51 \times 8$ mm
Power	≥ 75 W
Input Voltage	DC 24 V
Wavelength	450 nm (Blue Light)
Data Interface	CXP
Size	$300 \times 300 \times 253$ mm
Weight	11 kg

(1) Z-axis Regional Repeatability: The maximum value of the 2-sigma Z-axis repeatability obtained from measurements across 9 evenly divided regions within the Field of View (FOV), when imaging a target ceramic plate at near-field, mid-field, and far-field working distances, respectively.
(2) The 1-sigma standard deviation of 100 consecutive measurements of the difference between the average Z-value of Region A and the average Z-value of Region B. Both Region A and Region B are adjacent, and each has an area less than 1% of the total Field of View (FOV).

TRS Series

Tyrannosaurus Rex 3D Camera

TRS-075B

Product Overview

- Full-field scan speed up to 3 fps
- Four-projection, no dead spots
- FOV covers $74 \times 74 \times 8$ mm
- Z-axis repeatability to $1 \mu\text{m}$



Specifications

Parameter	Value
Model	TRS-075B
Resolution	5120×5120
Scan Range (Z-axis)	8 mm
Mid-field (WD, mm)	74×74 mm (191)
Optimal Working Distance	191 mm
Resolution, XY-axis	$14 \mu\text{m}$
Z-axis Repeatability	$1 \mu\text{m}$
Scan Rate	≤ 3 fps
Optimal Scanning Volume	$74 \times 74 \times 8$ mm
Power	≥ 75 W
Input Voltage	DC 24 V
Wavelength	450 nm (Blue Light)
Data Interface	CXP
Size	$360 \times 360 \times 350$ mm
Weight	17 kg