



## VL-500

### 3D Scanner CMM Controller



\*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

! This model has been discontinued. Contact Us: 1-888-539-3623  
Compliance with the certification standard is ensured as of the time of shipment from our company.

Recommended Replaceable Products: [3D Scanner CMM Controller - VL-700](#)

## Specifications

Model	VL-500		
Type	Controller		
Stage	VL-550, VL-530		
Measurement unit	VL-570		
Optical transmitter system	Offset transmission-type projector module		
Light sources	Observation light source	LEDs in 3 colors (red, green, blue)	
Optical receiver system	Low/high magnification offset dual optical module		
Light sources	Measurement light source	Blue LED	
Repeatability ( $\sigma$ )	2 $\mu\text{m}$ 0.000079**1		
Measurement accuracy	$\pm 10 \mu\text{m}$ 0.0004**2		
Measurement resolution	Standard mode (4M Mode)	4 million points	
	Fine mode (16M Mode)	VL-550: 16 million points*3 VL-530: -	
Measurement range	Low magnification	$\phi 300 \times H 200 \text{ mm } \phi 11.81" \times H 7.87"$	
	High magnification	$\phi 70 \times H 50 \text{ mm } \phi 2.76" \times H 1.97"$	
Display resolution	0.1 $\mu\text{m}$ 0.000004**4		
Stitching functions	Automatic rotation combined measurements	✓	
	Automatic XY combined measurements	VL-550: ✓ VL-530: -	
	Automatic XY combined measurement range	Low magnification (2 $\times$ 2 composition)	VL-550: $\phi 500 \times H 200 \text{ mm } \phi 19.69" \times H 7.87"$ VL-530: -
		Low magnification (3 $\times$ 1 composition)	VL-550: W 580 $\times$ D 300 $\times$ H 200 mm W 22.83" $\times$ D 11.81" $\times$ H 7.87**5 VL-530: -
		High magnification (2 $\times$ 2 composition)	VL-550: $\phi 110 \times H 50 \text{ mm } \phi 4.33" \times H 1.97"$ VL-530: -
High magnification (3 $\times$ 1 composition)	VL-550: W 150 $\times$ D 70 $\times$ H 50 mm W 5.91" $\times$ D 2.76" $\times$ H 1.97**5 VL-530: -		
Stage	Stage configuration	VL-550: Motorized XY $\theta$ stage mechanism VL-530: Motorized $\theta$ stage mechanism	
	Stage rotation	360° (infinite rotation)	
	Stage movement range	VL-550: $\phi 200 \text{ mm } \phi 7.87"$ VL-530: -	

	Tilt mechanism	Up to 45°
	Load capacity	VL-550: 50 kg <b>110.23 lb</b> VL-530: 20 kg <b>44.09 lb</b>
Control PC		Dedicated PC specified by KEYENCE (OS: Windows 10) <sup>6</sup>
Power supply	Power voltage	100 to 240 VAC ±10%, 50/60 Hz
	Power consumption	VL-550: Controller/Measurement unit: 200 VA, Stage: 80 VA VL-530: Controller/Measurement unit: 200 VA, Stage: 200 VA
Environmental resistance	Ambient temperature range	+ 15 to + 30°C <b>+59 to + 86°F</b>
	Ambient humidity range	20 to 80% RH (no condensation)
Weight		Controller: 3.8 kg <b>8.38 lb</b> Stage: 26 kg <b>57.32 lb</b> (VL-550), 25.4 kg <b>56.00 lb</b> (VL-530) Light blocking curtain: 5.5 kg <b>12.13 lb</b> (VL-550), 3.6 kg <b>7.94 lb</b> (VL-530) Measurement unit: 18.5 kg <b>40.79 lb</b>

\*1 Value when measurement is performed using the default measurement mode specified by KEYENCE and using the default standard gauge specified by KEYENCE and at an operating ambient temperature of 23°C ±1°C **+73.4°F ±1.8°F**

\*2 See JIS B7440-8, Value when measurement is performed using the default measurement mode specified by KEYENCE and using the default standard gauge specified by KEYENCE and at an operating ambient temperature of 23°C ±1°C **+73.4°F ±1.8°F**

\*3 4 megapixel CMOS and 4 times multi-shot

\*4 Common for X, Y and Z axes

\*5 Largest width for long and circular shape range

\*6 Windows 10 Pro

## Dimensions

\* Download CAD file or product manual for larger image/text and more detail.

