



VL-700

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.

Specifications

Model		VL-700	
Type		Controller	
Stage		VL-750,VL-730	
Measurement unit		VL-770	
Optical transmitter system		High-brightness dual projector module	
Optical receiver system		Low/high magnification offset dual optical module with wide dynamic range	
Light sources	Measurement light source	Blue LED	
	Color texture light source	LEDs in 3 colors (red, green, blue)	
Captured data format		Full-color textured 3D mesh data	
Repeatability (σ)		2 μm*1	
Measurement accuracy		±10 μm*2	
Measurement resolution		9 million points	
Measurement modes	Low magnification	High speed, Normal, Fine (wide field)	
	High magnification	Normal, Fine (High resolution)	
Measurement range	Low magnification	ø300 × H 200 mm ø11.81" × H 7.87"(wide field)	
	High magnification	ø70 × H 50 mm ø2.76" × H 1.97"(High resolution)	
Extended measurement	Automatic rotation combined measurements		✓
	Automatic XY combined measurements		VL-750: ✓ VL-730: —
	Automatic XY combined measurement range	Low magnification (2 × 2 composition)	VL-750: ø500 × H 200 mm ø19.69" × H 7.87" VL-730: —
		Low magnification (3 × 1 composition)	VL-750: W 580 × D 300 × H 200 mm W 22.83" × D 11.81" × H 7.87"*3 VL-730: —
		High magnification (2 × 2 composition)	VL-750: ø110 × H 50 mm ø4.33" × H 1.97" VL-730: —
		High magnification (3 × 1 composition)	VL-750: W 150 × D 70 × H 50 mm W 5.91" × D 2.76" × H 1.97"*3 VL-730: —
Stage	Stage configuration		VL-750: Motorized XYθ stage mechanism VL-730: Motorized θ stage mechanism
	Stage top panel size		ø500 mm ø19.69"
	Stage rotation		360° (infinite rotation)
	Stage movement range		VL-750: ø200 mm ø7.87" VL-730: —
	Tilt mechanism		Up to 45°
	Load capacity		50 kg 110.23 lb
Control PC		Dedicated PC specified by KEYENCE	
Power supply	Power voltage		100 to 240 VAC ±10%, 50/60 Hz
	Power consumption		Controller/Measurement unit: 320 VA

		Stage: 80 VA
Environmental resistance	Ambient temperature range	+15 to +30°C 59.0 to 86.0°F
	Ambient humidity range	20 to 80% RH (no condensation)
Weight		Controller: 3.7 kg 8.16 lb Stage: 26 kg 57.32 lb(VL-750),21.7 kg 47.84 lb(VL-730) Light-blocking cover: 5.5 kg 12.13 lb(VL-750),4.9 kg 10.80 lb(VL-730) Measurement unit: 19.6 kg 43.21 lb

*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 In reference to ISO 10360-8; 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 Largest width for long and circular shape range