



## VHX-7000

Digital Microscope



! This model has been discontinued.  
Compliance with the certification standard is ensured as of the time of shipment from our company.

Contact Us: 1-888-539-3623

## Specifications

Model		VHX-7000	
Camera	Image receiving element		
	[VHX-7020 High- Performance camera] 1/1.8 inch, 3.19 megapixel CMOS image sensor Total pixels: 2064 (H) × 1554 (V); virtual pixels: 2048 (H) × 1536 (V) [VHX-7100 Fully- Integrated] 1/1.7-inch, 12.22-megapixel CMOS image sensor; total pixels: 4168 (H) × 3062 (V); virtual pixels: 4024 (H) × 3036 (V)		
	Scanning system		
	Progressive		
	Frame rate		
	[VHX-7020 High- Performance camera] 50 F/S (max.) [VHX-7100 Fully- Integrated] 30 F/S (max.)		
	Resolution	Fast	[VHX-7100 Fully- Integrated] 2048 (H) × 1536 (V)
		Standard	[VHX-7020 High- Performance camera] 2048 (H) × 1536 (V) [VHX-7100 Fully- Integrated] 2880 (H) × 2160 (V)
		High-resolution	[VHX-7100 Fully- Integrated] 2880 (H) × 2160 (V) (4K Mode OFF), 4000 (H) × 3000 (V) (4K Mode ON)
		High accuracy	[VHX-7020 High- Performance camera] 6144 (H) × 4608 (V)*1 [VHX-7100 Fully- Integrated] 12,000 (H) × 9000 (V)*1
	High dynamic range		16-bit intensity range through RGB data from each pixel
	Gain		Manual, Preset
	Electronic shutter		[VHX-7020 High- Performance camera] Auto, Manual, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/9000, 1/19,000 [VHX-7100 Fully- Integrated] Auto, Manual, 1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/9000, 1/19,000
Supercharge shutter		[VHX-7020 High- Performance camera] Can be set in 0.01 s increments from 0.02 to 16 s [VHX-7100 Fully- Integrated] Can be set in 0.01 s increments from 0.03 to 4 s	
White balance		Push-set, Manual, Preset (2700K, 3200K, 5600K, 9000K)	
Back-focus adjustment		Not required	
Built-in light source	Type	High-intensity LED	
	Service life	40 thousand hours (reference value)	
LCD monitor	Size		
	Color LCD (IPS type), 27-inch*2		
	Screen size		
	596.736 (H) × 335.664 (V) mm <b>23.49" × 13.22"</b>		
	Pixel pitch		
	0.1554 mm (H) × 0.1554 mm (V) <b>0.006118" × 0.006118"</b>		
Number of pixels		3840 (H) × 2160 (V)	
Display colors		Approx. 1.07 billion colors*3	
Brightness		350 cd/m <sup>2</sup> (Center 1 Point, typical)	

	Contrast ratio	1300:1 (typical)	
	Viewing angle	±89° (typical, horizontal), ±89° (typical, vertical)	
Hard disk drive unit	Storage capacity	1 TB (including 350 GB reserved system space) Approx. 2.16 million images (when 3 megapixel images are compressed) to approx. 71.1 thousand images (when 3 megapixel images are not compressed)	
Image format		JPEG (with compression), TIFF (without compression)	
Observable image size		50 thousand (H) × 50 thousand (V) pixels (with stitching)	
Video output	Output method	Display port: 3840 × 2160 pixels	
	Scanning frequency	Special LCD monitor	132 kHz (H), 60 Hz (V)
		External monitor	
Input	Mouse input	USB mouse supported	
	Keyboard input	USB keyboard supported	
	External remote input	Pause/recording non-voltage input (with and without contact)	
Interface	LAN	RJ-45 (10BASE-T/100BASE-TX/1000BASE-T)	
	USB 2.0 series A	6 ports	
	USB 3.0 series A	2 ports	
Dimensions		625 (W) × 460 (H) × 180 (D) mm <b>24.61" × 18.11" × 7.09"</b> (when stored) (excluding the projected areas)	
Power supply	Power voltage	100 to 240 VAC ±10%, 50/60 Hz	
	Power consumption	430 VA	
Environmental resistance	Ambient temperature	+5 to 40°C <b>+41 to 104 °F</b> <sup>4</sup>	
	Relative humidity	35 to 80% RH (no condensation) <sup>5</sup>	
Weight	Controller	Approx. 12.0 kg	
	Camera unit	Approx. 0.6 kg (VHX-7020), approx. 5.0 kg (VHX-7100)	
	Handheld controller	Approx. 0.45 kg	

\*1 When using the high-resolution function by means of the motorized stage shift.

\*2 The LCD monitor provided with this system has been manufactured using extremely advanced technology. In very rare cases, an unlit pixel (black spot) or a lit pixel (bright spot) may be present on the screen. However, this is not indicative of a fault.

\*3 8-bit + 2 FRC display

\*4 5 to 35°C **41 to 95 °F** for hand-held observation with a standard camera

\*5 If the ambient operating temperature exceeds 40°C **104 °F**, use the product under conditions where the relative humidity is not more than 70%.

# Dimensions

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

