

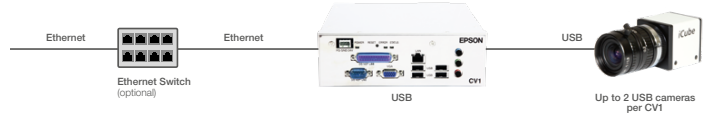
# Smarter and faster image processing

Epson Vision System seamlessly integrates kinematics, controller and image processing, allowing for rapid communication between the robot and image processing function.

## Epson Compact Vision CV1: Your entry to image processing

Combine up to eight standard or high resolution USB cameras in a permanent or mobile installation, using both integrated or offset lenses

View objects at a variety of focal lengths giving you precise control and visibility  
Ideal in environments where a computer is not always used for image processing



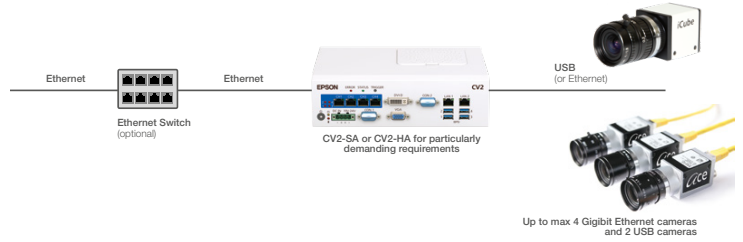
## Epson Compact Vision CV2: High-speed image processing

Ideal when there is no computer required to process images

Highly effective for tasks that require short cycle times and a high camera resolution (more than 1.3 MP) in both colour and monochrome

Combine up to four GigE cameras and two USB cameras, either mobile or stationary  
High-speed communication via GigaEthernet

Available as one of two variants: the standard CV2-SA, or the CV2-HA for more demanding requirements

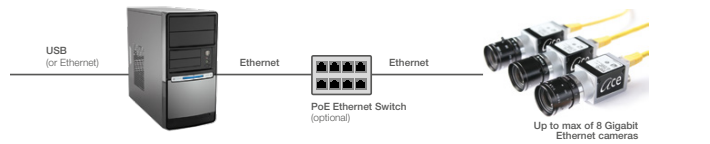


## Epson Compact Vision PV1: Image processing system via PC

Combine up to eight GigE cameras, either mobile or stationary

High-speed communication via GigaEthernet makes it ideal for short cycle times and high camera resolutions (more than 1.3 MP) in both colour or monochrome

Requires a computer for image processing



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# Image processing systems



Epson Compact Vision	CV1	CV2-S	CV2-H
Processor	-	Intel Pentium G2120	Intel Core-i7 3770
Ports	Ethernet, USB, monitor, mouse, keyboard	Ethernet, USB 2.0, monitor, mouse, keyboard	
Camera connections	Max. 2 USB cameras	Up to 4 GigE cameras and 2 USB cameras (6 cameras max.)	
Dimensions	190 x 63 x 197mm	232 x 70 x 175mm	
Power consumption	DC 24V ±5%/2A	DC 24V ±5%/12A	
Ambient temperature	5 - 40°C	5 - 40°C	
Weight	1.5 kg	2.1 kg	

b/w image processing

b/w and colour image processing



Epson USB cameras for Compact Vision (CV1 AND CV2)	USB VGA Mono camera	USB 1.3M Mono / colour camera	USB 5.0M Mono / colour camera
Resolution	640 x 480 pixels	1,280 x 1,024 pixels	2,560 x 1,920 pixels
Sensor types	CMOS - 1/3" Progressive Scan	CMOS - 1/2" Progressive Scan	CMOS - 1/2.5" Progressive Scan
Lens attachment	C / CS mount		
Camera use	Stationary camera 5m USB cable, Mobile camera 5m USB high flex cable		
Accessories (optional)	1x set of mounting brackets, lenses, individual 8, 12, 16, 25, 50mm, or as a set, 1x set of intermediate rings		
Dimensions without lens	33 x 30.5 x 30mm		
Weight	50 g		

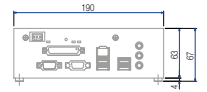
b/w image processing

b/w and colour image processing

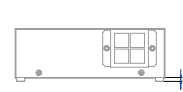


Epson GigE-Cameras for PC Vision (PV1) and Compact Vision (CV2)	GigE VGA Mono camera	GigE 2.0M Mono / colour camera	GigE 5.0M Mono / colour camera
Resolution	640 x 480 pixels	1,600 x 1,200 pixels	2,560 x 1,920 pixels
Sensor types	CCD - 1/4" Progressive Scan Global shutter	CCD - 1/1.8" Progressive Scan Global shutter	CMOS - 1/2.5" Progressive Scan Rolling shutter
Lens attachment	C / CS mount		
Camera use	Stationary camera 5m Gigabit Ethernet cable Mobile camera 5m Gigabit Ethernet high flex cable		
Accessories (optional)	1x set of mounting brackets, lenses, individual 8, 12, 16, 25, 50mm or as a set, 1x set intermediate rings, 10m Gigabit Ethernet cable, 10m Gigabit Ethernet high-flex cable		
Dimensions without lens	42 x 29 x 29mm		
Weight	90g		

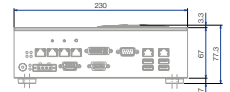
Front view (CV1)



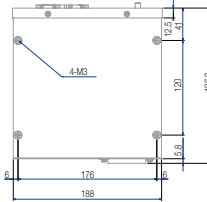
Rear view (CV1)



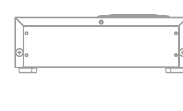
Front view (CV2)



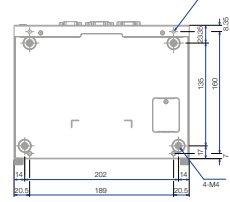
View from below (CV1)



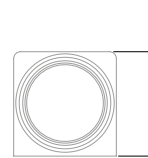
Rear view (CV2)



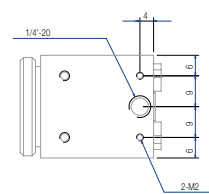
View from below (CV2)



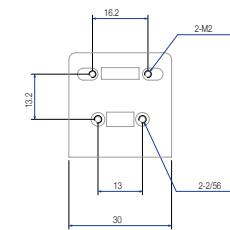
Front view



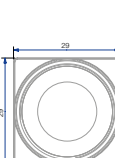
View from below



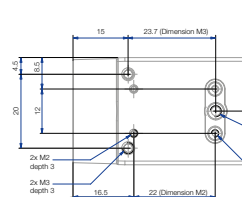
Rear view



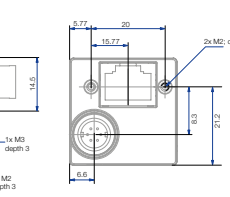
Front view



View from below



Rear view



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