A.



PCVision provides the same ease of use and affinity with robots as the RCXiVY2+ system.

PC-based Machine Vision RCXiVY2+ PCVision

49.18



What is "RCXiVY2+ PCVision"?

Apps working as RCXiVY2+ on Windows. By connecting the PC into which this software has been installed to the RCX controller, a PC vision system that is equivalent to the "RCXiVY2+ System" can be constructed.

system, a license for RCXiVY2+ PCVision needs to be purchased







RCXiVY2+ PCVision Download from the web site (member site).





If you have a PC and camera,

you can perform the recognition

test of workpieces.

Robot vision RCXiVY2+ system For features, read this barcode.



"Robot+ vision" allows you to

perform the simulation.

High-pixel camera up to 25 megapixels is supported.



When using the "RCXiVY2+ PCVision" without building it into the equipment

[The system can be used for pre-evaluation.]

Simply install the "RCXiVY2+ PCVision" software and connect the camera to check the vision system even without an RCX controller. It is possible to register the component type of the target workpiece, check the detection status, and adjust parameters from the camera connected to the PC or the images stored in the PC.



[Dummy camera can be set.]

By setting a dummy camera, images can be loaded from the specified folder at the time of the image capture command.



From camera layout examination to operation verification can be performed on the 3D emulator.

Simple equipment layout with RCX-Studio 2020

Camera can be installed in the 3D simulator. Maximum and minimum WD (work distance), and field of view range are displayed depending on the camera and lens combinations. Pre-verification of optimal combination and installation position can be performed.

Program simulation with RCX-Studio 2020

Test execution of programs containing vision commands can be performed. Program debugging and cycle time measurement can be performed without an actual machine.



When using the "RCXiVY2+ PCVision" with building it into the equipment

[Machine Vision on the PC of your production machinery.]

In the conventional "RCXiVY2+ System", the dedicated vision unit needs to be built into the robot controller. In the "RCXiVY2+ PCVision", your PC can be utilized for the equipment instead of the dedicated vision unit. The equipment can be designed at lower cost, and the degree of freedom in designing equipment and systems that utilize PCs is expanded.



[Various cameras are supported.]

GigE and USB cameras compatible with the GenICam standards can be used. In addition, a camera with 5 megapixels or more can also supported.

Use of a high-resolution camera makes it possible to perform more accurate detection and expand the field of view.

Usable camera	RCXiVY2+ unit	RCXiVY2+PCVision
	OMRON SENTECH	OMRON SENTECH HIKROBOT BASLER Other camera manufacturers (* Camera needs to be compliant with the GeniCam standards.)
Number of camera pixels	5 megapixels or less	25 megapixels or less

Compatibility with the "RCXiVY2+ system".

There is a compatibility with the conventional built-in type "RCXiVY2+ system". Robot commands, component type data, and calibration are common to the "RCXiVY2+ system". The "RCXiVY2+ PCVision" can be controlled by conventional robot commands.

[Comparison of "RCXiVY2+ PCVision" and "RCXiVY2+ unit"]



[Part Number]



Note1. Only one tracking board can be selected.

• Refer to the comprehensive catalog for details on the order format.

PC environment

Basic specifications

Supported OS	Windows 10 64-bit	
Required PC specification	Check the PC environment.	
Compatible camera manufacturers	OMRON SENTECH, HIKROBOT, BASLER Other manufacturers (Compliant with GenICam)	
Number of camera pixels	Max. 5,600 x 4,800 (Equivalent to a 25-megapixel camera)	
Number of cameras	Max. 8 cameras	
Camera interface	GigE and USB	
Camera type	Area scan camera, monochrome (color)	
Image capture	Camera: S/W trigger only Image file loading	
Model setting capacity	Edge, geometry, blob, code type Max. 254 each Fiducial mark 2 pcs.	
Search method	Edge, geometry, blob, code search	
Camera installation position	Fixed camera (upward, downward) Secured to the robot (Y/Z/R-axis).	
Setting support function	Calibration, image save function, various component type registrations, camera channel automatic setting, history image, automatic image save, dummy camera function	
Lighting	No lighting function	
Tracking	Pre-verification is required. Please contact your distributor.	

		Recommended environment	Minimum environment	
OS Execution environment		Windows10 (64bit)		
		.NET Framework 4.5 or higher		
	CPU	Intel Core i5 2GHz or higher	Intel Celeron 2GHz or higher	
Environment	Memory	8GB or more	4GB or more	
	Hard disk capacity	A free space of 500MB or more is needed at installation destination. * In addition, a free space to save images or data is also needed.		
	Communication port	Ethernet port, USB port (3.0)		
Applicable robot controller		RCX340 / RCX320 Ver2.06, R0411 or later		

About license

To connect the RCX3 series controller to RCXiVY2+ PCVision and use it as a robot vision system, a license for RCXiVY2+ PCVision is needed.

A license agreement is issued to customers who have purchased the license.

The license agreement contains the serial number of the target RCX3 series controller. The license key corresponding to this RCX3 series controller is described.



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