

Pattern Matching and Color Inspection Sensor

CVS2-RA series



FEATURES

- **All in one color vision sensor** : The sensor has a built-in Camera, LED Lighting, Display monitor and Controller. This structure enables water resistance IP67.
- **Pattern matching mode and Color inspection mode are available** : Inspection of shape and direction of the object is available by pattern matching mode. You can use CVS2-RA as simple Color inspection sensor as well. Sorting by color is also available.
- **Correct background brightness** : CVS2-RA has a function that corrects evenness of background brightness. You register just the background for reference.
- **Wide coverage line-up** : You can choose from 4 inspection range/field of view according to inspection target condition.
- **Setup Adjustable while line is running** : CVSE1-RA provides output with the setup parameters given even while you are adjusting setup. You don't have to stop the line.
- **Zoom function** : CVS2-RA has Zoom function so you can zoom in up to twice size.
- **Downloading setup parameters to PC** : You can download setup data and image data into PC. You can use the image data on PC and can copy setup to other CVS2-RA. Please use I/F cable CVS-C2C.

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CVS2-RA series

SPECIFICATIONS

Type	Appearance	Working distance	Field of view	Detection angle	Model	
					NPN type	PNP type
Long range		210 to 270mm	40 x 50mm to 55 x 65mm	10°	CVSE2-N10-RA	CVSE2-P10-RA
Standard type		90 to 150mm	40 x 50mm to 65 x 75mm	20°	CVSE2-N20-RA	CVSE2-P20-RA
Narrow view		31 to 39mm	17 x 20mm (±10%)		CVSE2-N21-RA	CVSE2-P21-RA
Macro view		50 to 100mm	50 x 65mm to 100 x 115mm	40°	CVSE2-N40-RA	CVSE2-P40-RA

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OPTIONS/ACCESSORIES

Type	Appearances	Description	Cable length	Model
Remote monitor		For CVS series	3 m	CVS-M1-R
		You can control from Remote monitor that has LCD and buttons to control remotely. The buttons work same as CVS series itself.		
PC I/F cable		For CVS1-RA, 2-RA, 3-RA, 4-R	2 m	CVS-C2C
		You can setup CVS1-RA, CVS2-RA, CVS3-RA and CVS4-R through each software and can get registered image. You can also modify mask area easily on the PC display.		
Video cable		For CVS series	3 m	CVS-CN
		You can see the display image connecting standard TV monitor (NTSC).		
Extension cable for Remote monitor		For CVS-M1-R	3 m	CVS-C3S
		You can connect Remote monitor through this cable up to 15m (4 CVS-C3S = 12m + 3m cable of Remote monitor)		
PC I/F cable + I/F cable for Video Out		For CVS1-RA,2-RA,3-RA,4-R	2 m	CVS-C2Y
		You can connect PC and CVS-M1-R. You can see the screen image on the CVS-M1-R. * You can't control through CVS-M1-R.		
PC I/F cable + Video cable		For CVS1-RA,2-RA,3-RA,4-R	2 m	CVS-C2P
		You can connect PC and get video signal at a time.		

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- External LED lighting

Type	Appearances	Description	Model
External LED lighting		High brightness Bar LED lighting with bracket Size 50x15mm	OPB-5015W2
		High brightness Bar LED lighting with bracket Size 100x15mm	OPB-10015W2
		Power supply LED controller	OPPD-15
		Bracket for Lighting	CVS-OPDB-2000
			CVS-OPDB-3040
			CVS-OPDB-6080
		Bracket for Lighting This is for mounting CVS series and external LED lighting.	CVS-OP1000L

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APPLICATIONS

2. Checking the lid of instant foods



CVS2-RA

Check the color and shape by its pattern matching function

4. Checking multiple colors on the box



CVS2-RA

Check existence of multiple color on the box registering multiple colors as reference

14. Checking ON/OFF of LED on PWB



CVS2-RA

Check the color and position of LED by its color pattern matching function

15. Checking order of the color of wires



CVS2-RA

Check the color and position of wires by its color pattern matching function

16. Checking existence of bad marking on parts

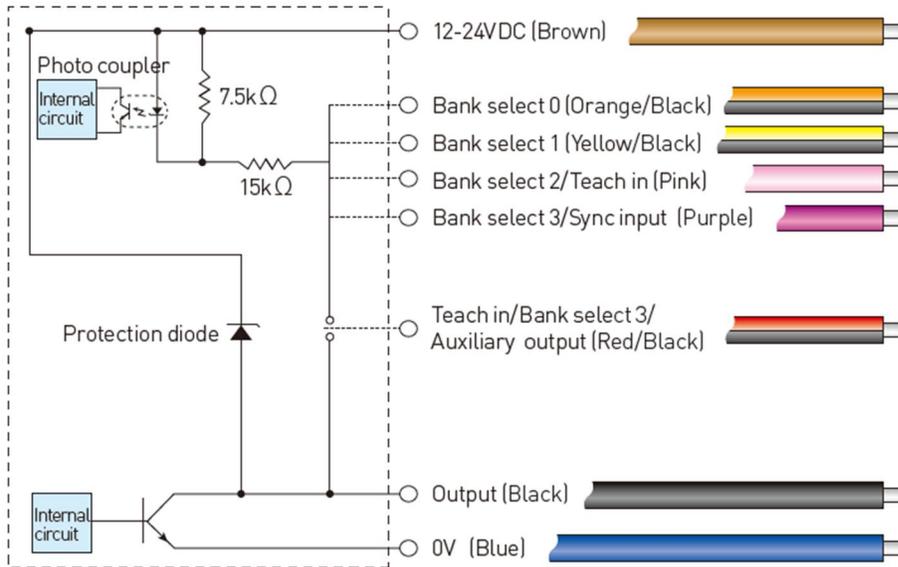


CVS2-RA

Check color of the parts and color of bad marking on the parts to detect existence of bad parts

Connection diagram

(NPN)



(PNP)

