

Simple & Easy Setup Color Area Sensor

CVSE1-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.
- **Three-Step-Teaching** : Teaching is easily done by three steps even in 30 seconds just like a color sensor.
- **Quick change over** : 16 Banks are available. You can remotely select the bank to use by PLC or other equipments.
- **Color Resolution** : Up to 15,000 colors are available to detect.
- **Stable inspection** : It calculates color hue of each pixel so stable inspection is available.
- **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.
- **Stable inspection** : It calculates color hue of each pixel that prevents miss-inspection affected by external light and brightness changes of lighting. Stable inspection is available and you can setup CVSE1-RA just like you do for photoelectric sensor.

Vision Sensors

CVSE1-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°	CVSE1-N10-RA	CVSE1-P10-RA
Standard type		90 to 150mm	40 x 50mm to 65 x 75mm	20°	CVSE1-N20-RA	CVSE1-P20-RA
Narrow view		31 to 39mm	17 x 20mm (±10%)		CVSE1-N21-RA	CVSE1-P21-RA
Macro view		50 to 100mm	50 x 65mm to 100 x 115mm	40°	CVSE1-N40-RA	CVSE1-P40-RA

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

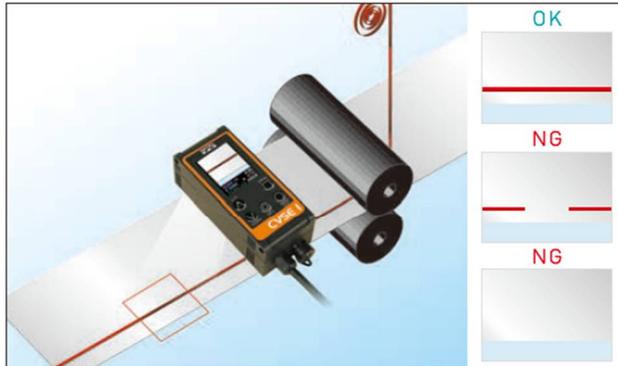
Type	Appearances	Description	Model
External LED lighting		High brightness Bar LED lighting with bracket Size 50x15mm	OPB-5015W2
		High brightness Bar LED lighting with bracket Size 100x15mm	OPB-10015W2
		Power supply LED controller	OPPD-15
		Bracket for Lighting	CVS-OPDB-2000
			CVS-OPDB-3040
			CVS-OPDB-6080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

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APPLICATIONS

3. Checking existence of cutting tape on the film



CVSE1-RA

Set the extracted color from the cutting tape and check its area in the field of view

5. Checking existence of seasoning bag



CVSE1-RA

Set the extracted color from the seasoning bag and check its area in the field of view

7. Checking existence of label on package



CVSE1-RA

Set the major color on the label and check its area in the field of view

11. Checking existence of description of pills



CVSE1-RA

Set the color area of description of pills in the field of view

13. Checking marking on electric components

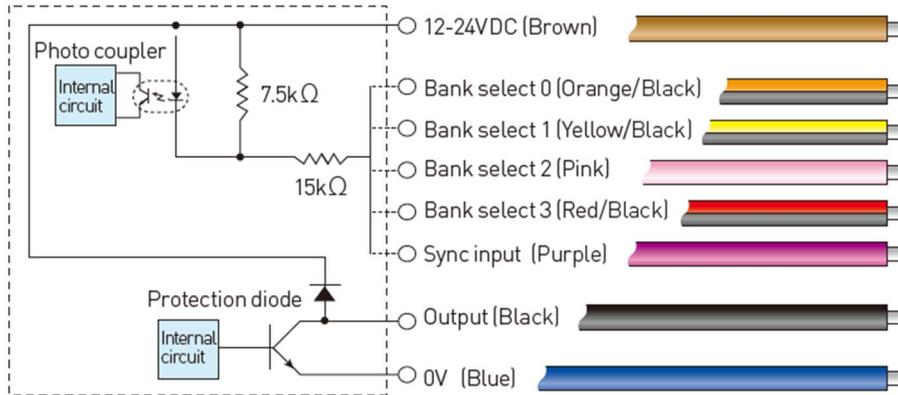


CVSE1-RA

Set the color of the marking and check its area in the field of view. Narrow angle view version can zoom up small area.

Connection diagram

(NPN)



(PNP)

