Label Safety

DCG-SLinear Vision Detector

Contact Image Sensor



Label safety is a matter that can not be ignored. Identify label printing defects, control waste, avoid fines and disputes, reduce rework, avoid legal liability.

With the DCG-S decoding software, You can choose colors freely for the LED light source in various modes. The parallel multi-threaded GigE-based scanning module, comes with low power consumption, low cost, and high extendibility.

Barcode Verification (Barcode Read & Defect Detection): Includes database comparison functions, expected variables within the area.

Optical Character Recognition (OCR): Reads characters and reports data content. **Optical Character Verification (OCV)**: Ensures that a sequence of consecutive characters is read and/or varified against a known field or database.

Digital Verification: Detects duplicates and sequence errors and matches variable numbers to external data files.

Template Comparison: Verifies encoded data of the label and ensures consistency of multiple data within the same label.

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Bar code reading

Multiple barcodes simultaneously reading, error checking and database comparison

2	
2	

OCR function

Number/character/Chinese character reading, date/serial number database comparison



Template comparison

Suitable for the error detection of fixed content, including texts and graphics



Roll-to-Roll variable data check

parcial barcode reading or multiple barcode reading at the same time, checking with the database, easy to use



Industrial data detection application

necessary inspection on Barcode & production date at each production stage in factory before delivery



Integrated label detector

The errors of defects that may occur during the label printing process are always unpredictable, causing downstream circulation problems. The DCG-S integrated detector can effectively control unnecessary confusion.

DCG-Ssensor is suitable for the inspection on flat surface. It has a very broad market prospect in printing, bar code printers, financial equipments and coding detection of film packaging. DCG-S is a new type of photoelectric imaging sensor well-developed after CCD and CMOS technology. It integrates a lenticular lens (Rod Lens), an LED array light source, a light-sensitive components array, and a signal amplifying circuit, focusing the image signal on the light-sensitive components array through lenticular projection. Due to the integration of the DCG-S (optical lens of the conventional imaging method are removed), the sensor size is effectively limited, and the advantages are more obvious over conventional "CCD/CMOS+optical lens" method in terms of device portability, installation and debugging. The LED light source array can effectively control the power consumption of the device, porviding longer service life while no warm-up is needed; The lenticular lens is used to realize 1:1 imaging between the objects and the light-sensitive components, and there will be no iamge field geometric distortion caused by the conventional optical lens, so the objects will be recorded with high quality.

Detection function	Supported data comparison function	General function	Special function	Suitable situation
Common one-dimensio nal code reading	Date comparison Serial number comparison Database comparison Readability test	 Correct/incorrect data saving Printing defect detected alarm 	Ability to detect white/black strips missing, sticking, broken lines, leaked ink, blemish	One-dimensional code reading
Common QR code reading	Date comparison Serial number comparison Jatabase comparison @Readability test	3Data transmit over the network to other terminal shutdown		QR code reading
OCR	①Date comparison ②Serial number comparison ③Database comparison ④Readability test	functions ④Detection area parameter saving		Number, character, Chinese
ocv	①correct / incorrect	 ②Defect detection alarm ④Detection area paramevter saving 		Suitable for the detection of variable contents with fixed pattern of digits.Mainly for the detection on lost characters.
Template comparison	①correct / incorrect	 Defect detection alarm Detection area parameter savingb 	According to the defect area, there are 10 levels in the color difference detection.	Suitable for the detection of fixed content, including texts and graphics etc.



Real-time Vision System

Barcode printers for industrial and commercial purpose are very extensive, we are not able to ensure that all barcode printer modles are suitable for the integration of DCS108&DCS54&DCS152

If your barcode printer is not compatible for DCG-S integrated sensor, we can provide you with external roll-to-roll application technology.

If DCG-S function does not meet your production needs, please contact us for more high-quality vision technology products to facilitate your production.

*DCG-S External Version also available

Product packaging identification application

Label identification offers safe solutions to production and packaging labels in logistics, printing, postal service, food, cosmetics, medicine, wire and cable, clothing accessories, steel, automotive, electronics, industrial packaging, polymer fluids, chemicals etc.

Consumers are very concerned about the safety and quality of their products. High-definition, correct, readable labels maximize the benefits of consumers and brand owners. If all these functions are completed manually, as the current labor costs continue to rise, and people will be affected by many factors, we can foresee that the effect will be greatly reduced. Therefore, this labelling & varifying system that can automatically realize the functions of detection, alarm and rejection is undoubtedly more suitable for the current market demand.

