



Label Checker

Complex label inspections with high performance OCR

SICK
Sensor Intelligence.

Advantages



High-end features

The multi-functional Label Checker simultaneously covers a broad range of inspection tasks, making sure that labeling processes run smoothly and efficiently at all times.

Digital image processing with the Label Checker enables the inspection of uneven surfaces.

Real-time correction of image errors (rectification)



The system function ensures that, if there are uneven surfaces, the captured camera images are assembled geometrically correctly. Perspective distortions and imaging errors caused, for example, by the barrel distortion of the lens are corrected, which significantly improves the label inspection.

Advanced label inspection



High performance OCR and verification for reading and inspection of production dates, batch numbers, etc. Robust algorithms convert printed text into a digital form to verify its correctness.



The Label Checker locates, reads and validates bar codes/ 2D codes within a defined area. It verifies the correct numerical sequence and checks the quality as well as the position of codes.



The shape locator feature tackles changing label positions. It searches for reference shapes in order to locate the label in any position. The Label Checker also offers a reading function with a 360-degree rotation.



Comprehensive label checking with high-end features to advance label inspection processes ensuring overall process quality.



Modular and reliable design

Choose your solution from a selection of system variants that provides numerous options of resolution and processing performance. Depending on your requirements, a range of different lenses and illumination types are available.

Extremely flexible



The system variants with modular camera design include exchangeable high-power LED lighting, a C-mount lens with an optional filter and a protective lens hood.



Thanks to its rugged housing, the Label Checker can operate during challenging environmental conditions such as disruptive vibrations, dust, high humidity and temperatures for extended periods.



Due to its modular and reliable design as well as wide selection of inspection functions, the Label Checker is suitable for a large variety of applications.



Straightforward compact device

The Label Checker is suitable for complex label inspection, yet easy to use. The function for easy font teach-in enables optimal reading reliability. A web interface is included for easy access and control.

User-friendly handling and set-up



Simple set-up from any system with a web browser. No need to install additional software.



The Label Checker can save an almost unlimited number of jobs on a microSD memory card – no need for reprogramming. Easy switching between jobs prevents downtimes.



Choose from a wide range of font packages or create and add individual font sets. The system is even able to read exotic fonts and symbols.



Easy handling and set-up of the Label Checker allow for simple integration into individual production processes.



Technical data overview

2D code types	Data Matrix ECC200 QR code Micro QR code PDF417 Aztec
Ambient temperature, operation	-20 °C ... +70 °C
Power consumption	± 20 %

Product description

Label Checker is a multifunctional and easy-to-set compact quality control system designed for various label inspections, with primary focus on optical character recognition. The system improves productivity by performing multiple inspections simultaneously and ensures high quality output. Thanks to the advanced tools, it is not limited to reading and verifying printed texts, barcodes and 2D codes, but it also checks the correct label position, presence of pictograms, and print quality. Moreover, Label Checker offers image filters and other features such as overlapping characters segmentation and-, image calibration that ensure reliable operation, even in challenging applications.

At a glance

- OCR, 1D, and 2D codes: reading, recognition, validation, verification
- Additional inspections: pattern matching, edge-to-edge measurement, pixel counter, blob inspection, shape locator, print quality check
- Easy teach-in of custom font
- Flexible range of C-mount lens and integrated illumination
- Web-based user interface

Your benefits

- Compact all-in-one system
- Multifunctional by combining various label inspections
- High reliability thanks to robust deep-learning-based algorithms
- Improved inspection on uneven surfaces due to real-time correction of image errors (rectification)
- Easy set-up and configuration via web interface
- Flexible optical design and high-power illumination, able to fit almost any application
- Rugged housing, ideal for harsh ambient conditions
- Multiple programs and job switching

Fields of application

- Production lines in the automotive industry
- Monitoring of primary and secondary packaging in the packaging industry
- Production lines in the pharma and cosmetics industry
- Packaging and shipping lines in the consumer goods industry
- Post-printing and packaging in the field of food and beverages
- Direct part marking (DPM) in the electronics and solar industry

Ordering information

Other models and accessories → www.sick.com/Label_Checker

Sensor	Type	Part no.
CMOS matrix sensor, grayscale values 1.3 Mpixel 1,280 px 1,024 px	LBC621-10RB	1115468
	LBC621-17NIR	1115470
	LBC621-17RB	1115469
	LBC631	1091689
CMOS matrix sensor, grayscale values 1.3 Mpixel 1,280 px 960 px	LBC611-06AB	1120348
	LBC611-12AB	1120347
CMOS matrix sensor, grayscale values 1.7 Mpixel 1,600 px 1,088 px	LBC642	1091687
CMOS matrix sensor, grayscale values 1.9 Mpixel 1,600 px 1,200 px	LBC632	1091688
CMOS matrix sensor, grayscale values 2.1 Mpixel 2,048 px 1,088 px	LBC652	1091686
CMOS matrix sensor, grayscale values 4.2 Mpixel 2,048 px 2,048 px	LBC654	1086947

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com