

BLC Print Inspection All-in-One System

B-ZT2336/4136/4166/4236/5136/6136/6166/6236/ZE5136



"Using a 1:1 imaging distortion-free intelligent flat field camera as the image sensor, it inspects 100% of each label's print quality, while simultaneously verifying that the content of the label matches the expected outcome."

Customer Benefits:

- Significantly reduce label inspection costs, saving both manpower and time.
- Control waste of labels and ribbons.
- Avoid various errors caused by manual data entry or recognition.
- Identify any defects in labels, printing issues, and data problems without fail.
- Ensure the quality of labels and products, maintaining brand reputation.
- Eliminate rework caused by label errors.
- Reduce the risk of non-compliance with label regulations.
- Notify operators of any decline in print quality, enabling proactive maintenance.

Main Advantages of BLC:

100% Inspection:

The intelligent camera perfectly integrates with the printer, allowing each printed label to be inspected simultaneously, ensuring a 100% inspection rate.

First Label Inspection:

Capable of inspecting even the smallest labels as short as 3mm from the very first label printed, ensuring no label is missed.

Non-Invasive Printer Integration:

Innovative hardware design requires no additional encoders or label sensors and does not replace any original printer components, nor does it require special firmware, thereby not affecting the printer warranty.

Fully Supports Printer Accessories:

The intelligent camera seamlessly operates with various printer accessories, enabling concurrent rewind and inspection, peel-off and inspection, and even supports cutter mode to cut the label post-inspection (optional).

Mandatory Inspection Mode:

The system can be set to a mode where if the inspection function is not activated, the printer will not print, enforcing mandatory inspection (optional).



Comprehensive Data Verification:

Supports detection of duplicate, missing, extra, or jumbled codes, and includes database comparison, date/time verification, serial number checking, quantity comparison, range comparison, and cross-referencing with other label areas.

Print Flaw Inspection:

Detects and marks any imperfections on the label, such as missing print, misalignment, distortion, ribbon wrinkles, or print head failures.

Barcode Grade Verification:

Verifies one-dimensional and two-dimensional barcodes against ISO15416 and ISO15415 standards for barcode grading (results are for reference only).

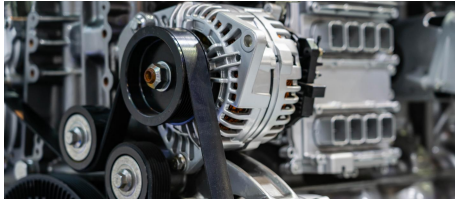
Multiple Alarm Methods:

When a problem label is detected, the system provides various alarm notification methods, including printer pause, flashing lights and beeping, on-screen alerts, or sending emails and WeChat notifications.

RFID Label Inspection:

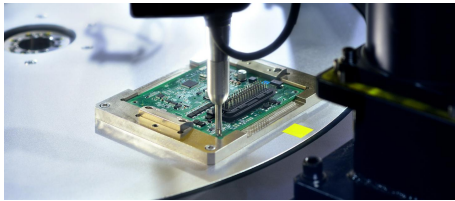
With an optional RFID reading module, the system can verify the consistency of visible and encoded content on RFID Label.

Application Scenarios



Auto Engine/Parts Factories

Ensure that each label meets the acceptance requirements of the auto engine factories to avoid product rejection due to incorrect labeling.



Electronic Products Manufacturing and Assembly

Ensure that all part labels comply with specifications and can be read easily in any manufacturing or maintenance process.



New Energy and Materials

Ensure that the label conforms to the customs specifications of the importing country, avoiding losses caused by label errors during the export inspection process.



Food & Beverage Industry

Ensure effective marking of manufacturing dates and expiry dates of products and compliance with food safety regulations during production.



Tire Manufacturers

Avoid repeating and mistakenly marking the vulcanization label on each tire so that the tire can be well identified and tracked.



Medical Devices and Vaccines

Create labels that comply with FDA UDI and EU MDR. Ensure all labels comply with the FDA DSCSA and EU Falsified Medicines Directive.



Warehousing and Logistics




Ensure that the product shipping label meets the requirements and take photos for review and traceability.






Chemical Industry and Cosmetics

Ensure that the labels of chemical products comply with industry standards, avoiding the risk of claims caused by mislabeling.

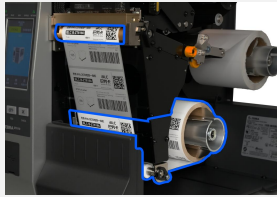
Product Specification

Models Specifications	B-ZT6126/B-ZT6136 B-ZT6166/B-ZT6236	B-ZT5126/B-ZT5136	B-ZT4126/B-ZT4136 B-ZT4166/B-ZT4236
Original Printer Model	ZEBRA ZT610 / ZT620	ZEBRA ZT510	ZEBRA ZT411 / ZT421
Product Pictures			
Maximum print and detection width	ZT610: 4.09"/104 mm ZT620: 6.6"/168 mm	4.09"/104 mm	ZT411: 4.09"/104 mm ZT421: 6.6"/168 mm
Maximum print and detection speed	14 ips/sec 356 mm (203 dpi) 12 ips/sec 305 mm (300 dpi) 6 ips/sec 152 mm (600 dpi)	14 ips/sec 356 mm (203 dpi) 12 ips/sec 305 mm (300 dpi)	14 ips/sec 356 mm (203 dpi) 12 ips/sec 305 mm (300 dpi) 6 ips/sec 152 mm (600 dpi)
Print Resolution (dpi)	203 dpi/8 dots per mm 300 dpi/12 dots per mm (Optional) 600 dpi/24 dots per mm (Optional for ZT610 only)	203 dpi/8 dots per mm 300 dpi/12 dots per mm (Optional)	203 dpi/8 dots per mm 300 dpi/12 dots per mm (Optional) 600 dpi/24 dots per mm (Optional for ZT411 only)
Dimensions (L/W/H)	ZT610:505mm/268mm/395mm ZT620:505mm/341mm/395mm	512.3mm/268.2mm/395.68mm	ZT411:495mm/269mm/324mm ZT421:495mm/336mm/324mm
Weight	ZT610: 50 lbs/22.7 kg ZT620: 57.4 lbs/26 kg	50 lbs/22.7 kg	ZT411: 36 lbs/16.33 kg ZT421: 40 lbs/18.14 kg
Flat-Field Camera Capture Resolutions	600dpi / 1200dpi		
Supporting 1D Barcode Detection Resolutions	600dpi support 3.3mil, 1200dpi support 2mil		
Supporting 2D Barcode Detection Resolutions	600dpi support 7mil, 1200dpi support 3mil		
Supporting Code Systems	All standard 1D and 2D Barcode		
Supporting Code Directions	All-direction		
Supporting OCR & OCV Font Sizes	600dpi support 5pt and above, 1200dpi support 2.5pt and above		
Supporting OCR & OCV Fonts	Main standard printing fonts : English, numbers, characters, simplified Chinese, traditional Chinese Optional : Korean, Japan, India, Latin, Russia, Sanskrit		
Maximum Detection Label Length	600dpi Colored 355mm、 1200dpi Colored 177mm、 600dpi Monochrome 1065mm、 1200dpi Monochrome 532mm		
Barcode grade Verification	Barcode grade verification:barcode grade verification and grading for 1D and 2D barcodes according to ISO15416, ISO15415 (The verification results are for reference only)		
RFID Label Verification	Option		
Supporting Printing Methods	Direct Thermal/Thermal Transfer		
Supporting Label Types	Spaced, Black line, Continuous		
Supporting Printing Modes	Tear Off, Rewinder, Peel Off, Cutter, Applicator		
Working Environment	Temperature: 32° - 104°F / 0° - 50°C, Humidity: 30% - 75% RH; No condensation		

Product Specification

Models Specifications	B-ZT2326/ZT2336	B-ZE5136-L/ZE5166-L B-ZE5136-R/ZE5166-R B-ZE5236	B-1136/B-1166 B-1726/B-1736
Original Printer Model	ZEBRA ZT231	ZEBRA ZE511 / ZE521	ZEBRA 110Xi4 / 170Xi4
Product Pictures			
Maximum print and detection width	4.09"/104 mm	ZE511: 4.09"/104 mm ZE521: 6.6"/168 mm	110Xi4: 4.09"/104 mm 170Xi4: 6.6"/168 mm
Maximum print and detection speed	12 ips/sec (203 dpi) 8 ips/sec (300 dpi)	18 ips/sec 457 mm (203 dpi) 12 ips/sec 305 mm (300 dpi) 6 ips/sec 152 mm (600 dpi)	14 ips/sec 356 mm (203 dpi) 12 ips/sec 305 mm (300 dpi) 6 ips/sec 152 mm (600 dpi)
Print Resolution (dpi)	203 dpi/8 dots per mm 300 dpi/12 dots per mm (Optional)	203 dpi/8 dots per mm 300 dpi/12 dots per mm (Optional) 600 dpi/24 dots per mm (Optional for ZE511 only)	203 dpi/8 dots per mm 300 dpi/12 dots per mm (Optional) 600 dpi/24 dots per mm
Dimensions (L/W/H)	432mm/241mm/279mm	ZE511: 379mm/245mm/300mm ZE521: 438mm/245mm/300mm	110Xi4: 517mm/261mm/393mm 170Xi4: 517mm/338mm/393mm
Weight	20 lbs/9.1 kg	ZE511: 32.5 lbs/14.7 kg ZE521: 35.5 lbs/16.1 kg	110Xi4: 22.7 kg 170Xi4: 30.5 kg
Flat-Field Camera Capture Resolutions	600dpi / 1200dpi		
Supporting 1D Barcode Detection Resolutions	600dpi support 3.3mil, 1200dpi support 2mil		
Supporting 2D Barcode Detection Resolutions	600dpi support 7mil, 1200dpi support 3mil		
Supporting Code Systems	All standard 1D and 2D Barcode		
Supporting Code Directions	All-direction		
Supporting OCR & OCV Font Sizes	600dpi support 5pt and above, 1200dpi support 2.5pt and above		
Supporting OCR & OCV Fonts	Main standard printing fonts : English, numbers, characters, simplified Chinese, traditional Chinese Optional : Korean, Japan, India, Latin, Russia, Sanskrit		
Maximum Detection Label Length	600dpi Colored 355mm、1200dpi Colored 177mm、 600dpi Monochrome 1065mm、1200dpi Monochrome 532mm		
Barcode grade Verification	Barcode grade verification:barcode grade verification and grading for 1D and 2D barcodes according to ISO15416, ISO15415 (The verification results are for reference only)		
RFID Label Verification	Option (UHF label according to ISO 18000-6C)		
Supporting Printing Methods	Direct Thermal/Thermal Transfer		
Supporting Label Types	Spaced, Black line, Continuous		
Supporting Printing Modes	Tear Off, Rewinder, Peel Off, Cutter, Applicator		
Working Environment	Temperature: 32° - 104°F / 0° - 50°C, Humidity: 30% - 75% RH; No condensation		

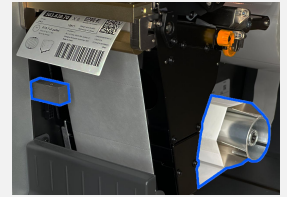
Optional accessories



Rewinder Inspection Kit

BLC-B-RDK-ZBRA-ZT4/5/6

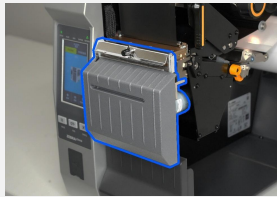
Supports ZT6, ZT5, and ZT4 series printers, with the function of detecting while rewinding



Peel Off Inspection Kit

BLC-B-PDK-ZBRA-ZT5/6

Supports ZT6 and ZT5 series printers, with the aim of achieving edge peeling and detection



Cutter Inspection Kit

BLC-B-CDK-ZBRA-ZT6/5/4

Supports ZT6, ZT5, and ZT4 series printers for detecting when cutting labels



Force Inspection Kit

BLC-B-FDK-ZBRA-ZT6/4

Support ZT6 and ZT4 series printers for mandatory detection



Vision Controller

BLC-VC-732500

CNC aluminum alloy chassis, i7 13th CPU, DDR5, 32G memory, 512G SSD



Gigabit Network Card (2 Port)

BLC-GN-2

2 Gigabit Ethernet ports, PCIe4



Gigabit Network Card (4 Port)

BLC-GN-4

4 Gigabit Ethernet ports, PCIe4



Gigabit Network Card (8 Port)

BLC-GN-8

8 Gigabit Ethernet ports, PCIe4

