



ALBERT

Self-learning vision system based on artificial intelligence

ALBERT is a complete and independent unit for visual inspection, based on the most advanced artificial intelligence techniques.

ALBERT learns the characteristics of a product directly from the production line and **autonomously** assesses its quality. ALBERT is very simple to use and does not require complicated programming procedures by experienced users, so it is quickly ready to control new products with different characteristics.

No traditional machine vision system is able to analyze complex objects or products with high variability as **simply** as a human operator would: ALBERT, on the other hand, interprets the concept of "quality" just like the fastest and most trained of your quality control operators. ALBERT is able to adapt to the production requirements of the moment since its "severity" level can be increased or decreased at the touch of a button, thus loosening or tightening the product acceptance criteria.

Each time, ALBERT chooses autonomously which will be the features to monitor that best describe the quality of your products. At any time and with a simple click, ALBERT can learn how to sort a new product or adapt to changing production conditions.

Model	ALBERT-01		
Description	Self-Learning Vision system based on artificial intelligence		
Application	In-line inspection		
	Working Distance (mm)		
Field of View	mm x mm	300	
		260 x 190	
		400	
		350 x 260	
		500	
		440 x 325	
Minimum Working Distance	mm	600	
		530 x 390	
		100	
		Optics	8 mm f1.4-f16 with manual focus adjustment
		Lighting system	LED diffuse strobe illuminator, 5700 K white
Line speed ¹	m/s	≈ 1	
Number of parts per second ²		20	
LED indicators	Yes (STATUS and SEVERITY LEVEL)		
N ° of storable images ³		≈ 800K	
Ports			
<i>Input</i>			
Synchronization input	1, opto-isolated (on top of the unit)		
<i>Output</i>			
for tower light	2 lights, 1 siren (on top)		
for ejector (s)	6, opto-isolated (on top)		
Synchronization output	1, opto-isolated (on top)		
<i>Communication</i>			
Ethernet	2 (on top)		
Wireless	Wi-Fi (802.11n)		
USB 3.0	4 (front of the unit)		
HDMI	1 (front)		

→ **Simple**

Learns and assesses the quality of your products directly from the production line without complicated settings.

→ **Intelligent**

Independently decides whether a product can be accepted and can control it in a more strict or tolerant way according to different production requirements.

→ **Self-learning**

Quickly learns the characteristics of a new product under inspection.

→ **Suitable to identify complex defects**

Is capable to understand the quality of products even with complex features and high variability.

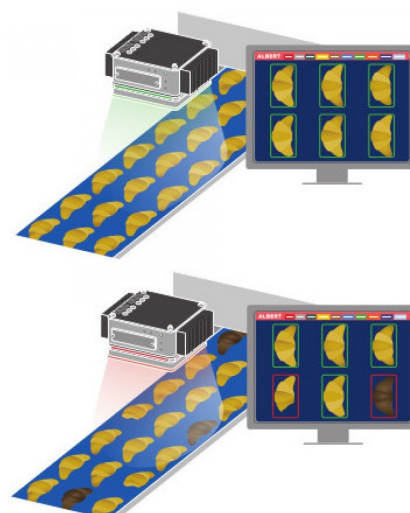
→ **IP65 Rated**

APPLICATIONS

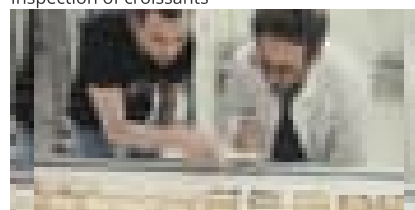
Ideal to quality check a variety of baked goods such as croissants and cookies but also frozen products, chocolates and various other foods, even when presented in a disorderly manner and with different orientations.



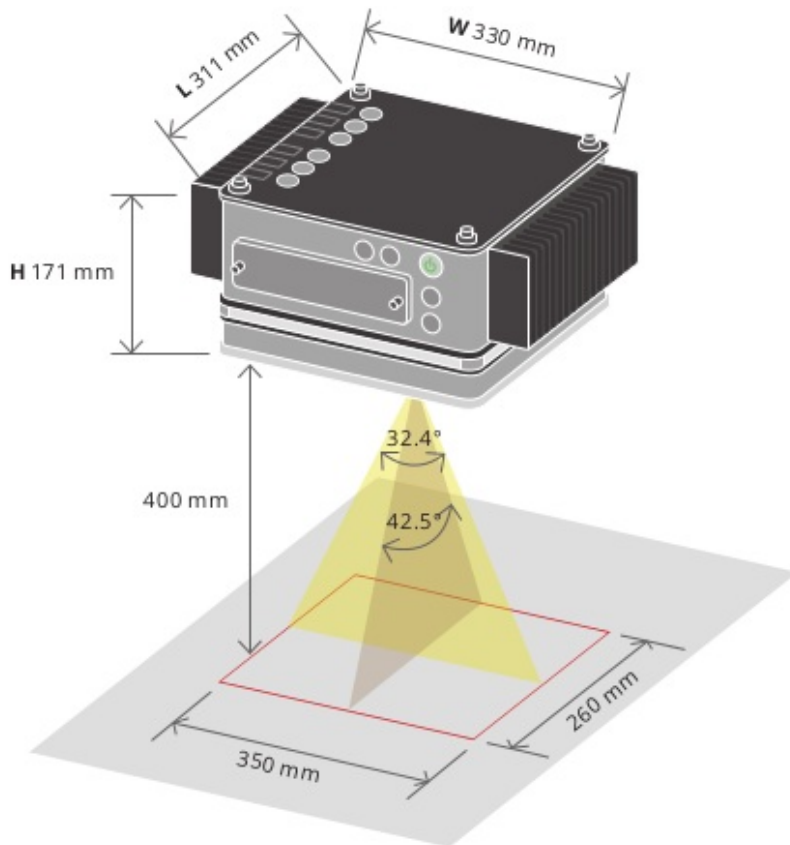
ALBERT



Inspection of croissants



DVI		1 (front)
Power Requirements		
Voltage	V, DC	24 ± 5%
Maximum power consumption	W	150
Cable		CBPWALB01 length 5 m IP68 (included)
Mechanical specifications		
Width W 4	mm	330
Length L	mm	311
Height H	mm	171
Weight	Kg	10
Material		AISI304 stainless steel, anodized aluminum, scratch resistant polycarbonate (Lexan Margard®)
Mounting		4X M6 holes (optional mounting accessories available)
Environment		
Operating temperature	°C	10-40
Storage temperature	°C	0-50
Humidity		20-85% (with no condensation)
IP class		65
Installation		indoor use only



ALBERT's Field of View at 400 mm working distance.

NOTES

Approximate value. Higher speeds are possible. Please contact us to check compatibility with your production line.
 Estimated value. The number of inspected parts per second may vary depending on their size and the speed of the line.
 Estimated value based on 250 Kbytes images stored in 200 GB SSD memory.
 Wireless antenna included.

COMPATIBLE PRODUCTS



PS series

Power supplies and light intensity controllers

RT-DRP-240-24	DIN rail power supply 240V ac - 24V dc 240 W
RT-DRP-480-24	DIN rail power supply 240V ac - 24V dc 480 W
RT-DRT-240-24	DIN rail power supply 400V ac three phase - 24V dc 240 W
RT-DRT-480-24	DIN rail power supply 400V ac three phase - 24V dc 480 W
