

INSPEKTO
AUTONOMOUS MACHINE VISION

DATASHEET

INSPEKTO S70 GEN.2



SPECIFICATIONS

Inspection	
Inspection cycle time	~0.3 seconds (*1)
Part speed	up to 0.75 m/sec (*2)
Installation distance	2cm - ∞ (*3)
Minimal defect size	0.33mm @ 10cm distance W/O optical zoom (*4)
Optical zoom level	X17
Optics and lighting adjustment (Focus, exposure, gain, others)	Autonomous embedded anti-reflection adaptive lighting
Detection and positioning	Autonomous
Trigger type	Automatic / manual / PLC / trigger-in
Sensor color	Greyscale
Number of inspection profiles supported on a single S70	Unlimited
Number of actionable inspection areas, regions of interest (ROIs)	Unlimited
PLC reporting is provided per ROI	64 ROIs(*5)
Lighting	Embedded, Anti-reflection adaptive lighting
Profile Loading Speed	
Loading Speed	1.8 sec (*6)
Controller	
OS	Linux (Ubuntu distribution)
Networking	Ethernet Wi-Fi
Industrial connectivity	Profinet, Ethernet/IP, TCP/IP, Digital I/O, Discrete I/O (*7)
Weight	4.5 kg
Dimensions - height, width, depth	110.5 mm, 225 mm, 240 mm
Supplied Monitor	
Size	21.5"
Resolution	1920 x 1080 at 60 Hz
Dimensions - height, width, depth	293.4 mm, 487.3 mm, 41.3 mm
Mounting	
Industrial grade adjustable mounting system	Adjustable arm; long arm' short arm; 3 connectors; knuckles
Mounting tools & accessories	2 screws, T-nuts & Allen wrench supplied
Cobots mounting	Ready for cobot mounting, ISO 9409-1-50-4-M6
Power	
Power Supply	110-240 Volt – 3 sockets for: Controller, Lighting, Monitor
Controller DC Input	1x 3-pin pluggable terminal block for 8~35VDC
Environmental	
Operating Temperature	Operating ambient range is of 10 to 38 °C (50 to 100 °F)
Humidity	20-80%
Maximum operating altitude	2000 m asl.
Outdoor/Indoor usage	Indoor only
Certification	CE certified
(*1) Cycle time may vary & depends on image grabbing method, triggering method and other factors. (*2) Requires triggering / automatic triggering (*3) Recommended work distance 2-100 cm (*4) Minimal defect size is depends on the Vision System's distance from the inspected part. (*5) Number of reported ROIs depends on connectivity type (*6) When loading profiles using connectivity (*7) Digital I/O and discrete digital I/O require additional module	

PRODUCT DIMENSIONS

The INSPEKTO S70 Gen. 2 is a self-contained visual inspection product. It comes ready to connect directly to your production line and your PLC with everything you need for deployment, is in the box.

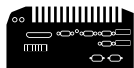
What's in the box



Vision System



Software



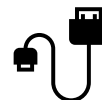
Industrial Controller



Mounting assembly



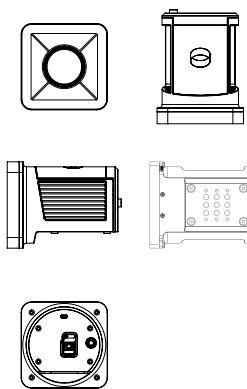
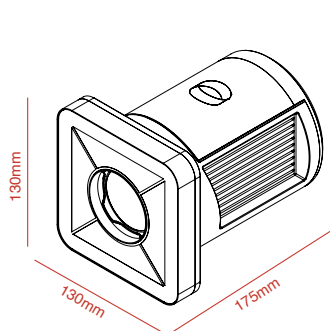
Keyboard & mouse



Cables



Monitor



Vision system

Fully integrated vision system includes:

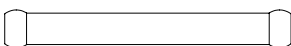
- Camera & lens (X17 optical zoom, pixel resolution of the camera 3.2MP)
- Anti-reflection adaptive lighting
- Vibrations sensor
- Quick release mounting adaptor

Mounting Assembly

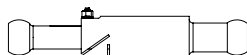
Flexible ruggedized industrial mounting assembly for installation in various modes, adaptable to any setting.

3 arm segments (long, short, adjustable) and 3 joints

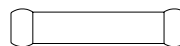
Long Segment [E] 18.5 cm



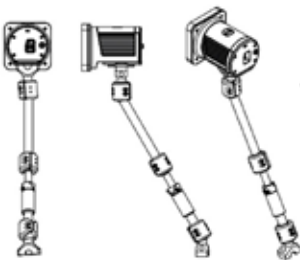
Telescopic Segment [F] 12.5 - 23 cm



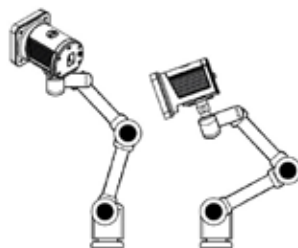
Short Segment [D] 8.5 cm



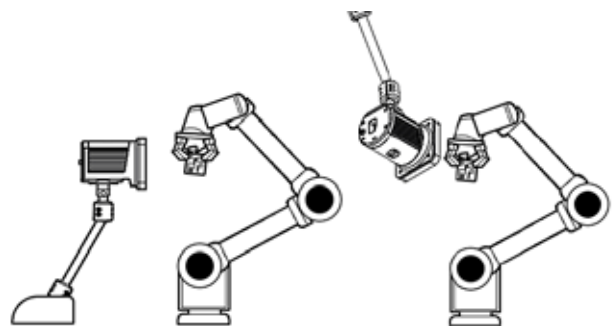
Sample setting



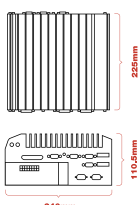
INSPEKTO S70
Standalone



INSPEKTO S70
integrated on a standard cobot



INSPEKTO S70
inspecting a part handed by a cobot



Industrial Controller

Ruggedized edge computing controller
Pre-installed INSPEKTO QUALIFY™ application

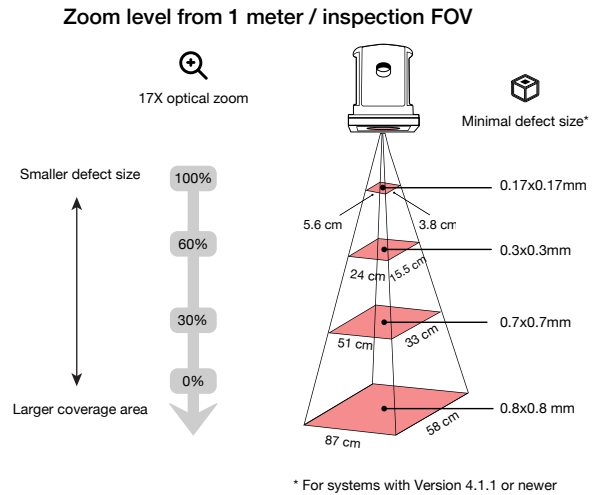


Wiring Diagram

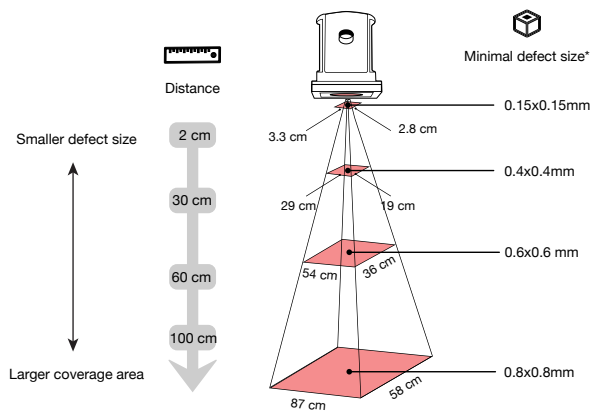
- PLC digital I/O connectivity
- Fast and easy wiring

Inspection Field of View and minimal defect size

Wide range of part sizes and minimal defect sizes detection.



Vision Sensor distance from part / inspection FOV



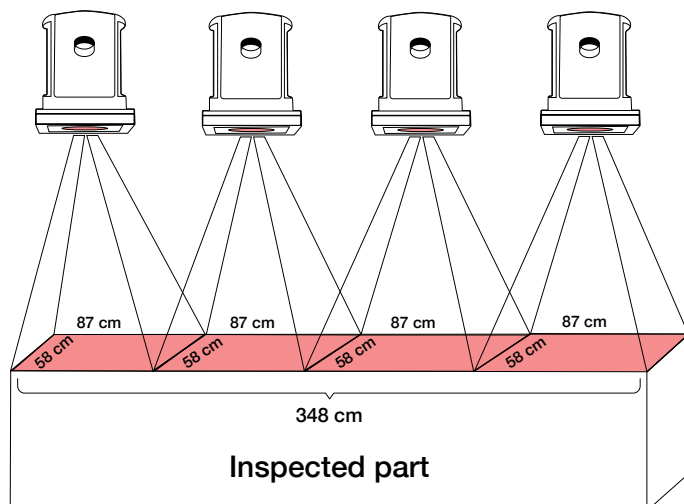
Correlated to the Vision System set-up distance from the inspected part and the level of the used optical zoom as described in the diagram.

* For systems with Version 4.1.1 or newer

* The recommended minimum WD for working without external light is 4cm.

Flexible set-up

The parameters of the vision system can be modified to inspect larger products by incorporating multiple systems along the production line.





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