

**INSPEKTO**  
AUTONOMOUS MACHINE VISION

# DATASHEET

# INSPEKTO S70



# SPECIFICATIONS

<b>Inspection</b>	
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
<b>Profile Loading Speed</b>	
Loading Speed	1.8 sec (*6)
<b>Controller</b>	
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
<b>Supplied Monitor</b>	
Size	21.5"
Resolution	1920 x 1080 at 60 Hz
Dimensions - height, width, depth	293.4 mm, 487.3 mm, 41.3 mm
<b>Mounting</b>	
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
<b>Power</b>	
Power Supply	110-240 Volt – 3 sockets for: Controller, Lighting, Monitor
Controller DC Input	1x 3-pin pluggable terminal block for 8-35VDC
<b>Environmental</b>	
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 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.

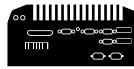
## What's in the box



S70 Vision Sensor



Software



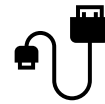
Industrial Controller



Mounting assembly



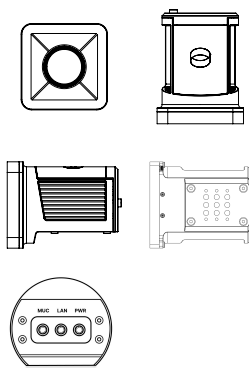
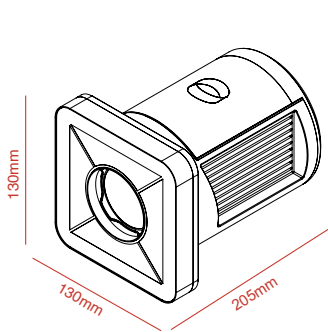
Keyboard & mouse



Cables



Monitor



## S70 Vision Sensor

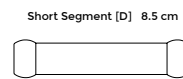
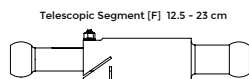
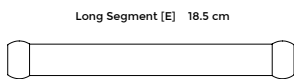
Fully integrated vision system includes:

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

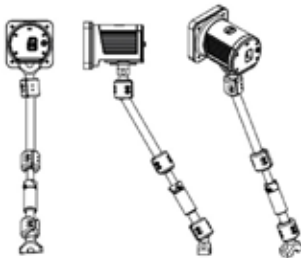
## Mounting Assembly

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

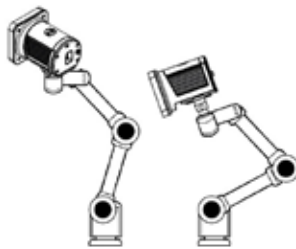
3 arm segments (long, short, adjustable) and 3 joints



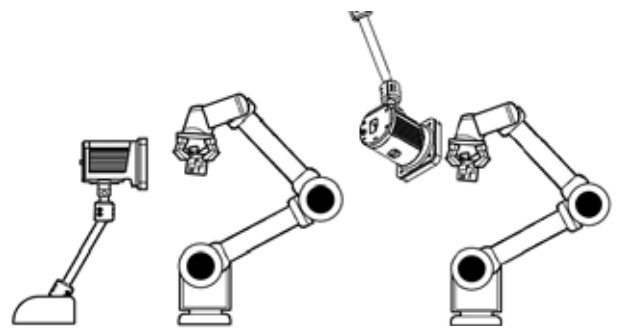
## Sample setting



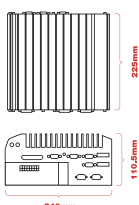
INSPEKTO S70 Standalone



INSPEKTO S70 integrated on a standard cobot



INSPEKTO S70 inspecting a part handed by a cobot

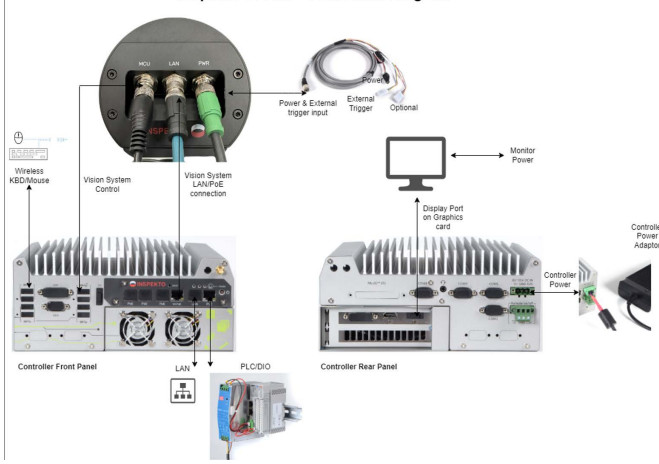


## Industrial Controller

Ruggedized edge computing controller  
Pre-installed INSPEKTO QUALIFY™ application



Inspekto S70 IBP Connection Diagram



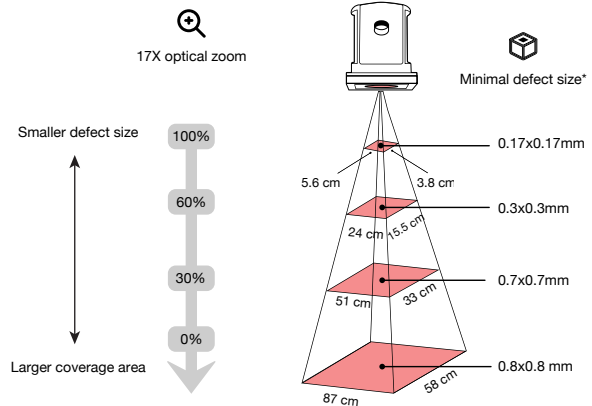
## Wiring Diagram

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

## Inspection Field of View and minimal defect size

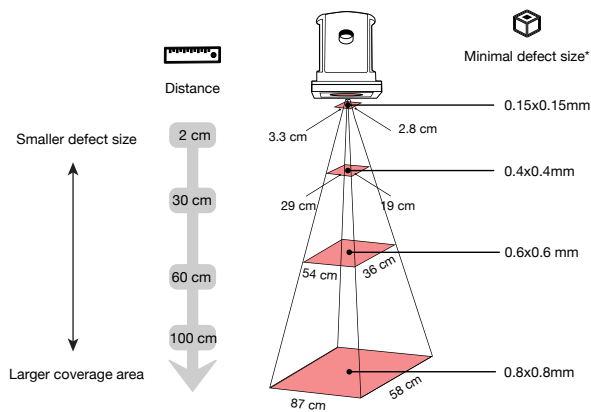
Wide range of part sizes and minimal defect sizes detection.

Zoom level from 1 meter / inspection FOV



\* For systems with Version 4.1.1 or newer

Vision Sensor distance from part / inspection FOV



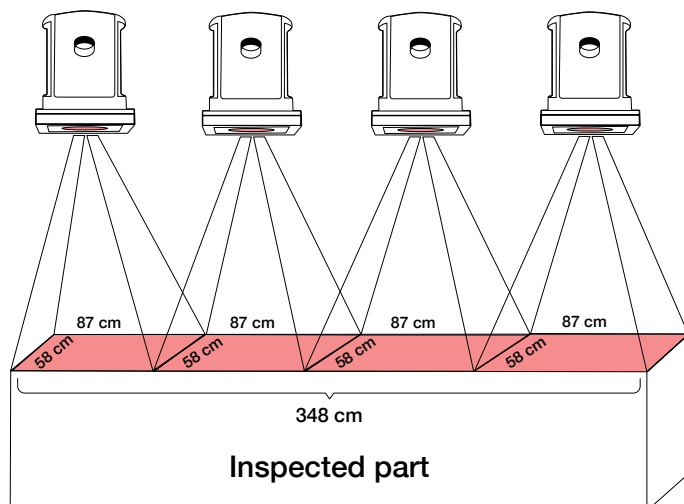
Correlated to the Vision System set-up distance from the inspected part and the level of the used optical zoom as described in the diagram.

\* 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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