



# InspectorP61x

Powerful 2D vision sensor for tight spaces

2D MACHINE VISION

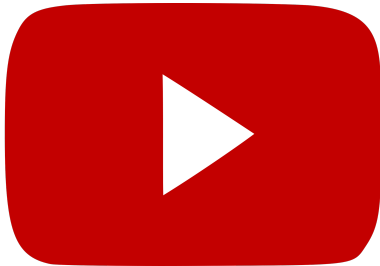
**SICK**  
Sensor Intelligence.

## Advantages

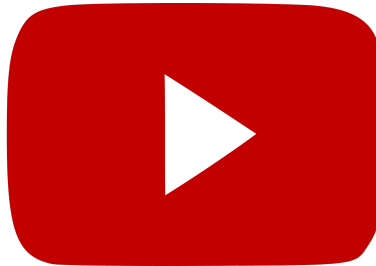


### Simplicity out of the box

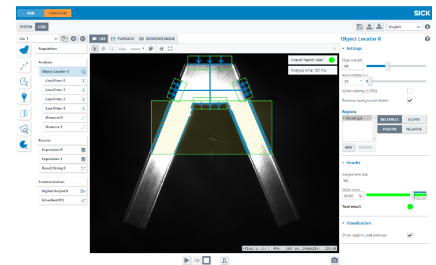
The ultracompact InspectorP61x fits into tiny spaces, and getting started to use it for inspection, positioning, and measuring is easy. The InspectorP6xx is a series of highly flexible all-in-one vision systems. Machine vision tools for quality assurance are integrated into the Quality Inspection SensorApp included with the sensor. Nonexpert users can easily configure the sensor in no time through an intuitive web user interface.



Optics, illumination, and Quality Inspection SensorApp with machine vision tools included for convenient quality assurance.



Snap-in mounting takes just seconds.



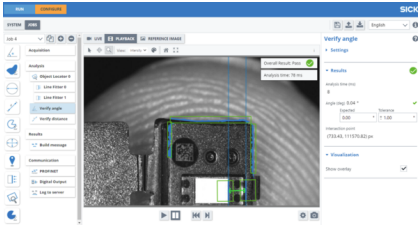
Easily configure the sensor in no time through an intuitive web user interface.



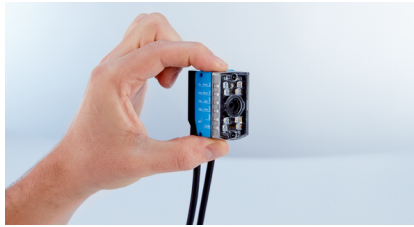
**Get started instantly with quick mounting and intuitive web user interface.**

### Measures fine details, fits into tiny spaces

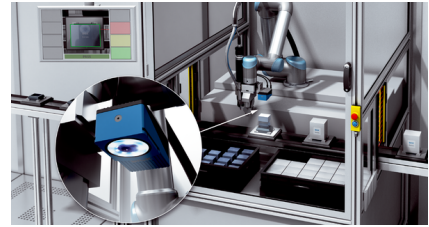
The InspectorP61x is perfect for inline inspection of parts, assemblies, and finished products. Small- and medium-sized objects or parts of larger objects are easily inspected with the integrated illumination feature. Its small form makes the sensor ideal for machines where space is limited and for robot end-of-arm mounting.



Reliably measures very fine details with super close-ups.



Ultracompact 2D vision sensor fits into tiny mounting spaces.



Perfect for robot end-of-arm mounting.



**The InspectorP61x works perfectly for the inspection of small- and medium-sized objects and where space is limited.**

## Go one step further with SICK Nova

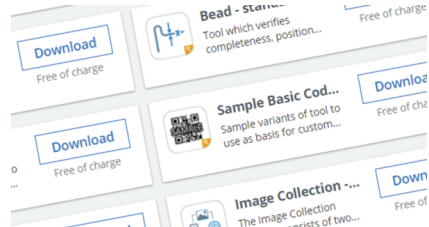
The Quality Inspection SensorApp based on SICK Nova is included with InspectorP6xx 2D sensors. What does this mean? Machine vision applications are easily handled in a web browser using point-and-click configuration, giving users the freedom to combine tools for image processing and integration as they need. But the functionality does not end there: With SICK Nova, users can download additional Nova tools or develop their own, allowing them to quickly and conveniently extend functionality to fit the application – without limitations.



Quickly solve tasks with just the right tools at your fingertips.



Choose the right sensor for the application and use the same familiar software.



Rapidly create customized solutions with AppPool downloads or custom development.



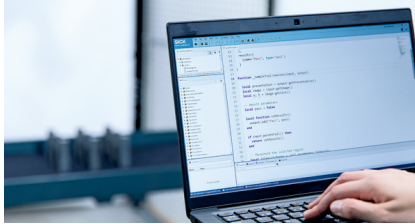
**Rapidly handle your applications like never before. Add, combine, and customize tools with ease.**

## Endless possibilities with SICK Nova in AppSpace

Some applications require everything to be programmed from scratch. So it is good to know that behind SICK Nova you have the SICK AppSpace ecosystem. Programming is fully flexible, and you have the support of other programmers and AppSpace developers.



Use SICK AppStudio for developing SensorApps and Nova tools that can run directly on all InspectorP devices.



Combine existing tools with custom code for turbocharged development and flexible re-use in SICK Nova.



The SICK Support Portal is the central community platform of a SICK AppSpace developer and offers access to tutorials, tools, documentation, and FAQs.



**Development in SICK AppStudio facilitates complete customization if needed.**

## SICK LifeTime Services

SICK's services increase machine and plant productivity, enhance the safety of people all over the world, provide a solid foundation for a sustainable business operation, and protect investment goods. In addition to its usual consulting services, SICK provides direct on-site support during the conceptual design and commissioning phases as well as during operation.

The range of services not only covers aspects like maintenance and inspection, but also includes performance checks as well as upgrades and retrofits. Modular or customized service contracts extend the service life of plants and therefore increase their availability. If faults occur or limit values are exceeded, these are detected at all times by the corresponding sensors and systems.



### Consulting and design

Application-specific advice on the product, its integration and the application itself.



### commissioning and maintenance

Application-optimized and sustainable — thanks to professional commissioning and maintenance by a trained SICK service technician.



### service contracts

Extended warranty, SICK Remote Service, 24-hour helpdesk, maintenance, availability guarantees and other modular components can be individually combined on request.



### Technical data overview

|                               |   |                   |                                      |                   |                                     |               |                                      |                |                                      |
|-------------------------------|---|-------------------|--------------------------------------|-------------------|-------------------------------------|---------------|--------------------------------------|----------------|--------------------------------------|
| <b>Sensor</b>                 | CMOS matrix sensor, grayscale values  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Sensor resolution</b>      | 1,280 px x 960 px (1.2 Mpixel)  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Light source</b>           | <table border="0"> <tr> <td>Internal lighting</td> <td>LED, Visible, amber, 617 nm, ± 50 nm</td> </tr> <tr> <td>Internal lighting</td> <td>LED, Visible, blue, 470 nm, ± 15 nm</td> </tr> <tr> <td>Feedback spot</td> <td>LED, Visible, green, 525 nm, ± 15 nm</td> </tr> <tr> <td>Adjustment aid</td> <td>Laser, Visible, Red, 630 nm, ± 15 nm</td> </tr> </table> | Internal lighting | LED, Visible, amber, 617 nm, ± 50 nm | Internal lighting | LED, Visible, blue, 470 nm, ± 15 nm | Feedback spot | LED, Visible, green, 525 nm, ± 15 nm | Adjustment aid | Laser, Visible, Red, 630 nm, ± 15 nm |
| Internal lighting             | LED, Visible, amber, 617 nm, ± 50 nm  |                   |                                      |                   |                                     |               |                                      |                |                                      |
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| Feedback spot                 | LED, Visible, green, 525 nm, ± 15 nm  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| Adjustment aid                | Laser, Visible, Red, 630 nm, ± 15 nm  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Optical focus</b>          | Adjustable focus (manually)   |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Lens</b>                   | Integrated  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Operator interfaces</b>    | Web server  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Control elements</b>       | 1 pushbutton  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Serial</b>                 | ✓, RS-232   |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Ethernet</b>               | ✓, TCP/IP, FTP (not yet available in the pre-installed Quality Inspection SensorApp)  |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>EtherNet/IP™</b>           | ✓   |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>PROFINET</b>               | ✓, PROFINET Single Port   |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Configuration software</b> | Web GUI (SensorApp configuration), SICK AppManager (IP determination and configuration, SensorApp installation), SICK AppStudio (programming)   |                   |                                      |                   |                                     |               |                                      |                |                                      |
| <b>Dimensions</b>             | 50 mm x 40.3 mm x 29.6 mm   |                   |                                      |                   |                                     |               |                                      |                |                                      |

### Product description

The InspectorP61x, an industrial ultracompact 2D vision sensor, is perfect for inline inspection of smaller parts, assemblies, and finished products. Its small form makes the sensor useful in applications where space is limited or for robot end-of-arm mounting. The integrated optics and illumination enable the user to tune the light's brightness, color, and shape and obtain high-quality images out of the box. The included Quality Inspection SensorApp lets both expert and nonexpert users configure the sensor in no time through an intuitive web user interface. Users can further extend or replace the functionality thanks to a growing collection of SICK Nova Tools and SensorApps from SICK AppPool or through custom development if needed.

### At a glance

- Minuscule size
- Integrated high-quality illumination with adjustable color and shape
- Easy inspection of small- and medium-sized objects
- Snap-in mounting done in seconds
- Integrated machine vision tools with Quality Inspection SensorApp
- Optional programming with SICK AppSpace or HALCON

### Your benefits

- Ultracompact 2D vision sensor fits into tight mounting spaces
- Reliably measures very fine details with super close-ups
- Instant start with quick mounting and intuitive web user interface
- Quick results with integrated tools for handling machine vision tasks
- Addition or extension of tool functionality for customized solutions with SICK Nova
- Exceptional programming flexibility in SICK AppSpace or HALCON
- Flexible production with great options for data and measurement communication
- Deep learning available as licensed option

## Fields of application

- Inline quality control for electronics, packaging, and automotive industries
- Manufacturing and assembly verification
- Part localization and measurement
- Detail inspection, counting, and measurement
- Perfect for robot end-of-arm mounting
- Add-ons through other SensorApps such as OCR and code reading

## Ordering information

Other models and accessories → [www.sick.com/InspectorP61x](http://www.sick.com/InspectorP61x)

- **SensorApp:** Quality Inspection SensorApp included, Optional license for Intelligent Inspection Deep Learning SensorApp
- **Products by tasks:** quality inspection, positioning, measuring, 2D, Code reading
- **Internal lighting:** amber, blue
- **Working distance:** 50 mm ... 300 mm
- **Sensor resolution:** 1,280 px x 960 px (1.2 Mpixel)
- **Sensor:** CMOS matrix sensor, grayscale values
- **Optical focus:** adjustable focus (manually)

| Lens              | Type           | Part no. |
|-------------------|----------------|----------|
| 12 mm, integrated | V2D611P-MMSCE4 | 1116350  |
| 6 mm, integrated  | V2D611P-MMSBE4 | 1114809  |

## 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](http://www.sick.com)