Product family overview

InspectorP65x

Fast and flexible – for inspection tasks with a long range

SICK
Sensor Intelligence.

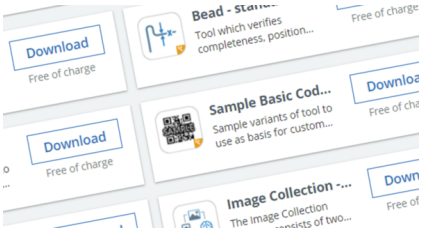
Advantages

Go one step further with SICK Nova

The Quality Inspection toolset of 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, check out these Tutorials for how! Link to playlist

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



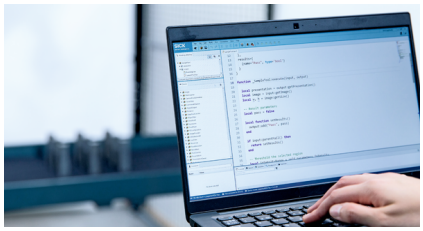
Rapidly create customized solutions with AppPool downloads or custom development.

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.

Unleash the capabilities of AI-assisted quality control

AI functionality makes machine vision tasks easier than ever. By teaching the vision sensor using examples instead of manually setting up rules, users can solve applications quickly while gaining new levels of inspection capabilities. Combining the benefits of AI tools and rule-based tools opens up extensive possibilities for solutions, regardless of how experienced the user is with machine vision.

Find out more about the AI solutions from SICK

Training the AI on the device
SICK Nova provide easy-to-use AI tools that can be taught using examples. Collect, train, and execute directly on the device. Combine with rule-based tools to easily verify known specifications.

AI training using SICK dStudio
SICK dStudio Cloud Service trains AI at scale with optimized inspection accuracy and speed on the sensor. Convenient data management and collaborative annotation make handling large data sets a breeze and makes it possible to take on big projects with confidence.

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

Sensor	CMOS matrix sensor, grayscale values
Sensor resolution	2,048 px x 1,088 px (2.1 Mpixel) 2,048 px x 2,048 px (4.2 Mpixel)
Optical focus	Adjustable focus / dynamic focus control (depending on type)
Lens	C-mount
Optical format	1″
Operator interfaces	Web server
Control elements	2 buttons
Serial	✓, RS-232, RS-422
Ethernet	✓, TCP/IP, FTP, HTTP
CAN	✓, SICK CAN sensor network (CAN controller/CAN device)
EtherNet/IP™	✓
PROFINET	✓, PROFINET Single Port, PROFINET Dual Port (optional via external connection module CDF600-2)
Configuration software	SICK AppStudio
Dimensions	142 mm x 90 mm x 46 mm [1)] 142.8 mm x 90 mm x 106.1 mm

[1)] Housing only, without lens and optics protection hood.

Product description

The InspectorP65x is an industrial programmable and configurable 2D vision camera for long-range and high-resolution vision tasks. Boasting image resolutions of 2-4 megapixels, an IP 65 housing, and a flexible high-end optical design, it is perfectly equipped to meet demanding automation environments. The application software is fully flexible thanks to the SICK AppSpace development environment, with image processing powered by HALCON and SICK Algorithm Library.

At a glance

- 2D vision sensors with 2.1 and 4.2 megapixels
- Configuration of toolset in a web browser
- Programming of new SensorApps in SICK AppStudio
- Flexible C-mount lenses and integrated illumination
- Laser alignment aid, beeper and feedback spot
- Includes HALCON runtime license and SICK Algorithm Library

Your benefits

- Flexible optical design and high-power lighting enable long-distance and large FOV setups
- Easy start for anyone with the pre-installed Quality Inspection toolset of SICK Nova
- Fast, high-resolution programmable 2D cameras ensure maximum performance
- Unique operator interaction possibilities thanks to powerful set of convenience features
- Addition or extension of tool functionality for customized solutions with SICK Nova
- Exceptional programming flexibility in SICK AppSpace or HALCON
- Deep learning available as licensed option

Fields of application

- Robot picking
- Precise part positioning
- Quality inspection of shapes and dimensions
- Defect and part presence detection
- Calibrated, high-accuracy measurements
- Track and trace by code reading and OCR
- Object sorting

Ordering information

Other models and accessories ➜ www.sick.com/InspectorP65x

- **SensorApp:** Nova Inspector
- **License included:** Quality Inspection License, Optional upgrade with the Intelligent Inspection Upgrade License, which enables productive use of the complete toolset.
- **Products by tasks:** classification, identifying, Position determination, 1D code, 2D code, presence inspection, Quality check, measuring, 2D, OCR
- **Sensor:** CMOS matrix sensor, grayscale values

Illumination	Illumination color	Lens	Sensor resolution	Optical focus	Type	Part no.
To be ordered separately as accessories	–	To be ordered separately as accessories, C-mount	2,048 px x 1,088 px (2.1 Mpixel)	Adjustable focus	V2D652P-2MCXXA6	1082303
			2,048 px x 2,048 px (4.2 Mpixel)	Adjustable focus	V2D654P-2MCXXA6	1082304
Integrated	White Blue	–	2,048 px x 1,088 px (2.1 Mpixel)	Dynamic focus control	V2D652P-2MEWHA6	1082305
			2,048 px x 2,048 px (4.2 Mpixel)	Dynamic focus control	V2D654P-2MEWHA6	1082306

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