



Lector61x

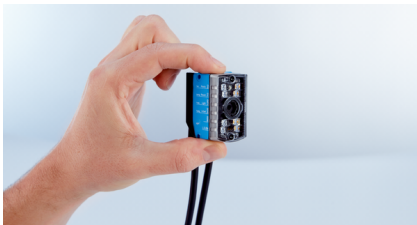
1D, 2D and DPM code identification using a compact camera – ideal for miniature codes as well

SICK
Sensor Intelligence.

Advantages



Reliable scanning technology optimized down to the smallest detail



Space-saving format

The Lector61x is an ultracompact camera-based code reader that requires a minimum of space to install.



Flexible mounting

Thanks to the connector with flexible cable routing, the Lector61x can also fit into very restricted installation spaces on assembly machines, for example in the electronics industry.

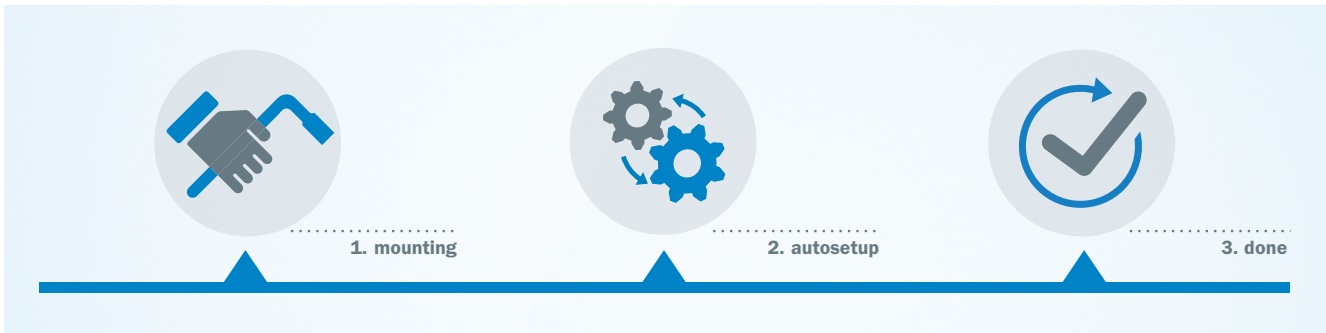


Integrated magnifying effect

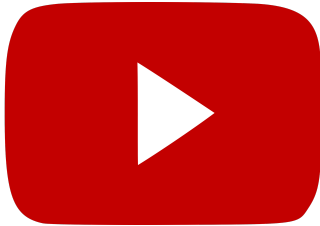
The Lector61x offers an increased read range of 50 to 300 mm as well as a special optical design with magnifying effect. This makes it especially versatile and enables it to read microcodes of less than 1 mm in size.



Saves space but not performance: The compact construction including connector with flexible cable routing, and the special optical design of the Lector61x make it suitable for a variety of applications in production lines where installation space is at a premium.

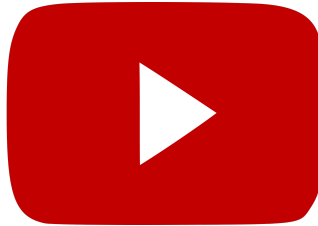


Simply click-in, adjust and set up



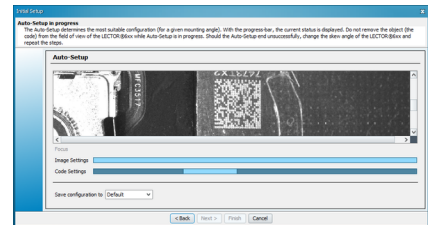
Rapid mounting

The snap-in bracket makes mounting quick and cost-effective. Further optical accessories such as a polarizing filter can be attached easily without the need for additional tools. The integrated position sensor also saves time and effort when aligning the Lector61x.



Always in focus

The product family comprises two focus variants. The variant with a manually adjustable focus allows infinitely-variable adjustment of the focus position between 50 mm and 300 mm. The built-in distance sensor provides feedback as soon as the image is sharp. In the case of the liquid lens device variants, focus adjustment is even easier and occurs fully automatically from object to object.

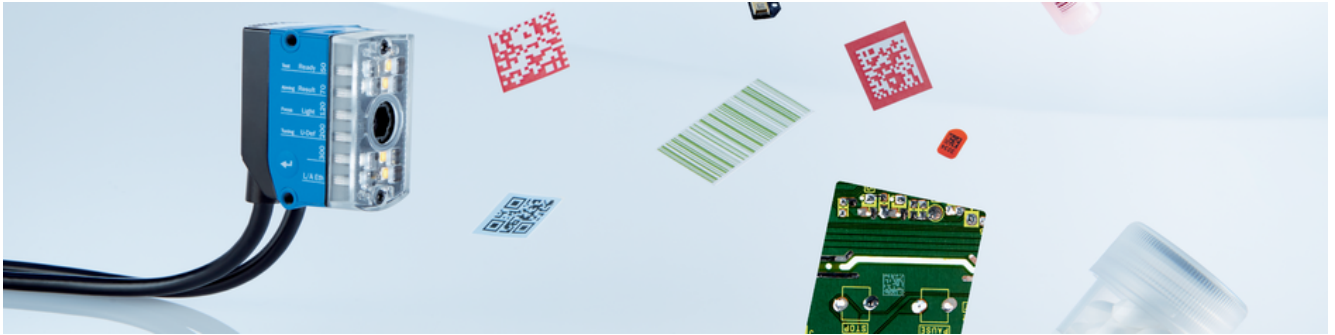


Intelligent parameterization

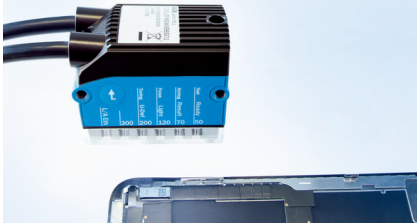
A setup wizard guides the user quickly and clearly through the parameterization process. The Lector61x adjusts itself automatically. Thanks to automated parameter switching, it handles changing read conditions extremely well thereby guaranteeing a higher read rate.



Ready for use in next to no time: Thanks to the rapid mounting, easy set up, and automated configuration, the Lector61x saves time, effort and therefore costs.

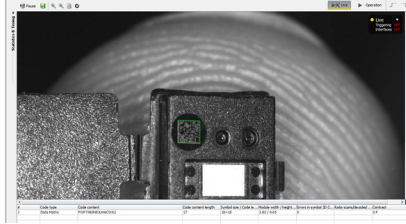


Made for any task



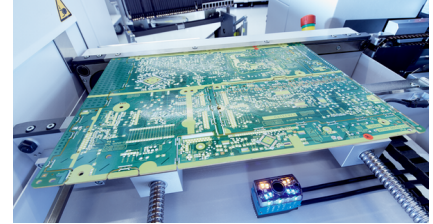
Also likes low contrasts

Thanks to the high-performance DPM decoder, the Lector61x can also reliably read low-contrast and/or distorted DPM codes.



Doesn't mind it small

The integrated special optics with magnifying effect enables the Lector61x to read even the smallest microcodes with a cell size of up to 0.02 mm for 1D codes and 0.04 mm for 2D codes.



Loves all colors

With its all-in-one illumination concept and adjustable illumination color, the Lector61x masters a variety of surface colors and characteristics.



Small, fast, universal: The Lector61x can be tailored to a wide variety of requirements, and delivers reliable results even under difficult conditions thereby helping to increase productivity.

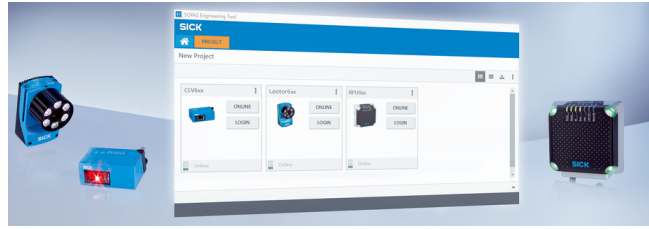
4Dpro – THE FLEXIBILITY YOU NEED

The sensor manufacturer SICK offers a broad portfolio of identification and vision solutions which are developed and produced in-house. Whichever solution you choose today, you can be sure of a flexible future with the 4Dpro concept. All 4Dpro sensors are compatible and interchangeable with one another. Standardized connectivity, a standardized user interface, and a standardized accessory concept – we call this unique combination 4Dpro.



standardized connectivity

All 4Dpro sensors feature the same modular connectivity. This provides the basis for a flexible fieldbus link combined with high process reliability. What's more, you benefit twice over: the purchase order process is less complicated and integration is quicker and easier.



standardized user interface

All 4Dpro sensors use SICK's universal device configuration software. This means that you can quickly familiarize yourself with all technologies. Data is sent to the control in the required format and the inputs and outputs of the 4Dpro sensors can be analyzed quickly by an event monitor.



Investment security, easy commissioning, low level of training required, fast and flexible exchange, even when switching between different identification technologies.

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

Focus	Teach auto focus (liquid lens) / adjustable focus (manually) (depending on type)
Sensor type	CMOS matrix sensor, grayscale values
Sensor resolution	1,280 px x 960 px 640 px x 480 px
Scanning frequency	40 Hz
Reading distance	50 mm ... 300 mm
Enclosure rating	IP65 / IP54 (depending on type)
Ethernet	✓, TCP/IP
PROFINET	✓
EtherNet/IP™	✓
Serial	✓, RS-232
CAN	✓
CANopen	✓
Weight	165 g

Product description

The Lector61x is the smallest image-based code reader of the Lector® series. It is used for the reliable detection of 1D, 2D and stacked codes and is characterized by excellent reading properties for very small codes, regardless of the surface quality or the material color. The compact housing with flexible cable routing makes it the ideal code reader for production lines where space is tight. Its variable and infinitely adjustable focus position can be adjusted manually or via liquid lens technology, which enables it to be used at short and long reading distances. It can be quickly and cost-effectively installed thanks to the snap-in mounting feature.

At a glance

- Powerful DPM code reader
- Compact design
- Snap-in mounting done in seconds
- Focus position can be adjusted manually or automatically via liquid lens technology
- Controllable multi-color lights with optional polarizing filter
- Magnifier effect for detection of the smallest codes
- Easy auto set-up
- Integrated laser distance measurement (ToF)

Your benefits

- Flexible in use: small design, variable reading distances and reading of codes on different material colors
- Increase in productivity: code reading is possible even if the quality of the code is poor or if the surfaces are glossy
- Low-cost commissioning: snap-in mounting done in seconds and automatic parameterization
- An industrial trend: integrated optics with magnifier effect for mini codes on small components and integrated distance measurement
- Automatic focus adjustment for liquid lens device variants: for easy installation, greater depth of field, and longer production service life

Fields of application

- Electronics and solar industries: PCB, component and device identification
- Consumer goods industry: serialization and package content monitoring
- Storage and conveyor systems: tote identification
- Automotive industry: production control and traceability of devices

Ordering information

Other models and accessories → www.sick.com/Lector61x

- **Readable code structures:** 1D codes, 2D codes, Stacked, direct-marked codes
- **Sensor resolution:** 1,280 px x 960 px
- **Illumination:** integrated
- **Illumination color:** amber, blue
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Optical focus	Lens	Type	Part no.
Teach auto focus (liquid lens)	Integrated, 12 mm	V2D611D-MLSCE5	1114291
	Integrated, 6 mm	V2D611D-MLSBE5	1115203
Adjustable focus (manually)	Integrated, 12 mm	V2D611D-MMSCE4	1110306
	Integrated, 6 mm	V2D611D-MMSBE4	1105795

- **Readable code structures:** 1D codes, 2D codes, Stacked
- **Sensor resolution:** 1,280 px x 960 px
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Optical focus	Lens	Type	Part no.
Teach auto focus (liquid lens)	Integrated, 12 mm	V2D611R-MLSCE5	1144345
	Integrated, 6 mm	V2D611R-MLSBE5	1144346
Adjustable focus (manually)	Integrated, 12 mm	V2D611R-MMSCE4	1117772
	Integrated, 6 mm	V2D611R-MMSBE4	1117773

- **Readable code structures:** 1D codes, 2D codes, Stacked, direct-marked codes
- **Sensor resolution:** 640 px x 480 px
- **Optical focus:** adjustable focus (manually)
- **Illumination:** integrated
- **Illumination color:** amber, blue
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Lens	Type	Part no.
Integrated, 12 mm	V2D610D-MMSCE4	1105796
Integrated, 6 mm	V2D610D-MMSBE4	1105797

- **Readable code structures:** 1D codes, 2D codes, Stacked
- **Sensor resolution:** 640 px x 480 px
- **Optical focus:** adjustable focus (manually)
- **Illumination:** integrated
- **Illumination color:** amber, blue
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Lens	Type	Part no.
Integrated, 12 mm	V2D610R-MMSCE4	1117774
Integrated, 6 mm	V2D610R-MMSBE4	1117775

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