



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.

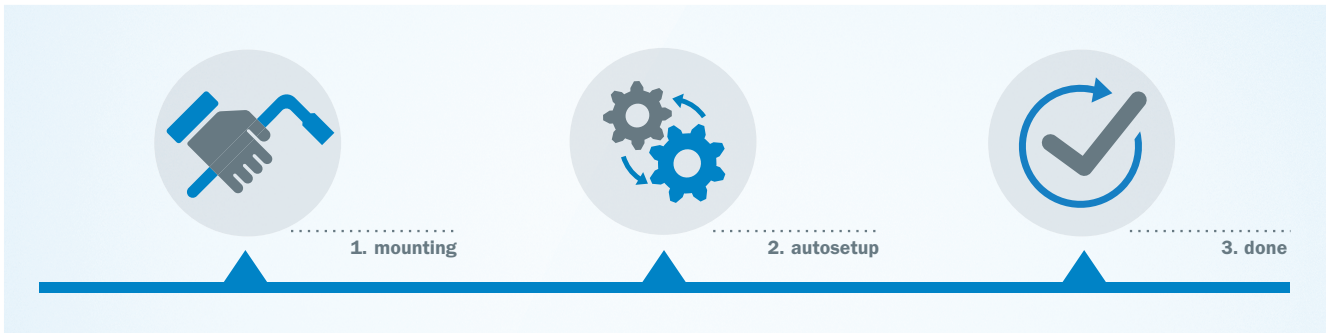


Integrated magnifying effect

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



Lector61x
Snap-in Bracket: Sensor mounting within 10 seconds

Rapid mounting

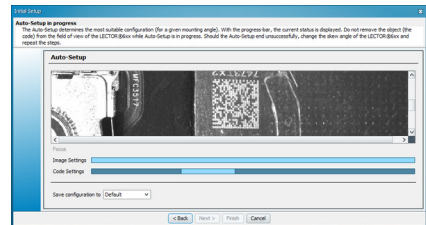
The snap-in bracket makes mounting quick and cost-effective. Further optical accessories such as a polarizing filter can be attached easily without the need for additional tools. The integrated position sensor also saves time and effort when aligning the Lector61x.



Lector61x
Simple focusing, either manual or with liquid lens

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.

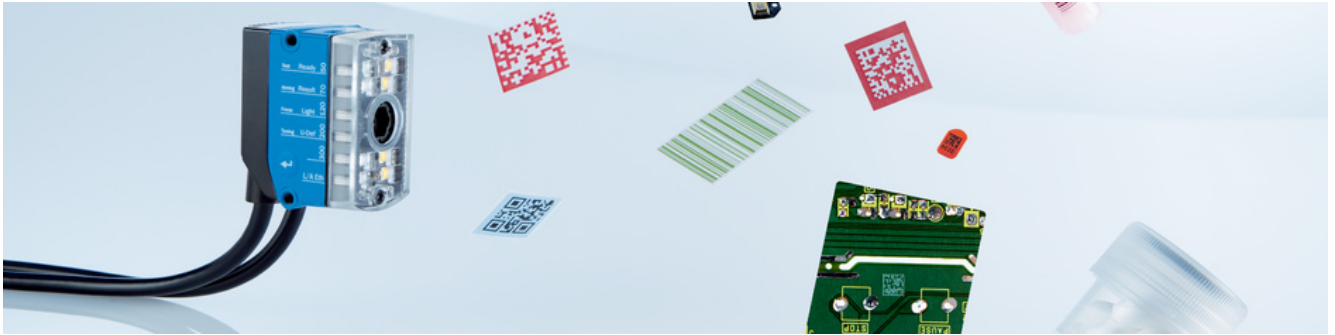


Intelligent parameterization

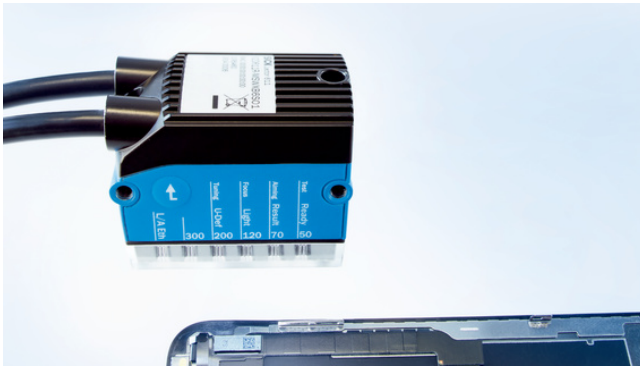
A setup wizard guides the user quickly and clearly through the parameterization process. The Lector61x adjusts itself automatically. Thanks to automated parameter switching, it handles changing read conditions extremely well thereby guaranteeing a higher read rate.



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.

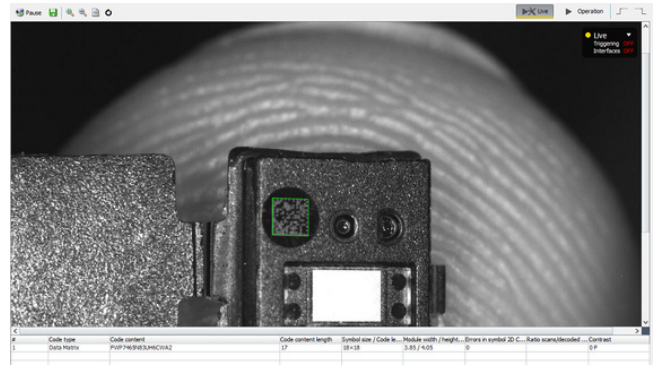


Made for any task



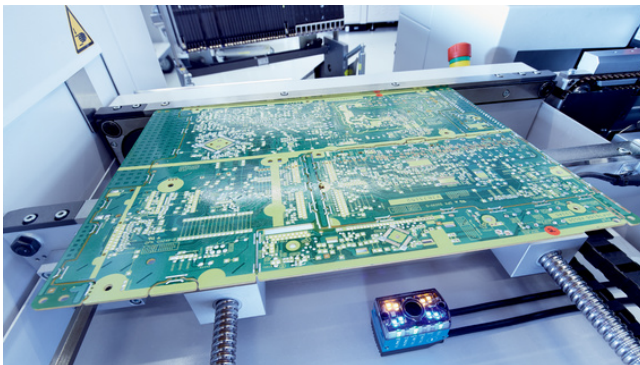
Also likes low contrasts

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

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



eliminates reflections

Reflections can be effectively eliminated thanks to the polarizing filter that can be switched on via software.



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

From consulting to modernization: SICK LifeTime Services increase the productivity of plants and machines, improve the safety of your employees, and provide a solid foundation for sustainable business operations. As a solution provider, SICK works with you to manage the holistic implementation of projects relating to industrial automation, safety and digitalization.



Comprehensive industry know-how and more than 75 years of practical experience create ideas and provide knowledge for your solutions. Find out more



Technical data overview

Focus	Adjustable focus / teach auto focus (depends on variant)
Sensor type	CMOS monochrome
Sensor resolution	1,280 px x 960 px (1.2 MP) 640 px x 480 px (0.3 MP)
Scanning frequency	40 Hz
Enclosure rating	IP54 / IP65 (depends on variant)
Ethernet	✓, TCP/IP
PROFINET	✓
EtherNet/IP™	✓
EtherCAT	✓, optional over external fieldbus module
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

- **Variant:** Complete device
- **Optical focus:** adjustable focus (manual)
- **Illumination color:** amber, blue
- **Communication interface:** Ethernet, PROFINET, EtherNet/IP™, EtherCAT®, Serial, CAN, CANopen
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Sensor resolution	Focal length	Type	Part no.
1,280 px x 960 px (1.2 MP)	6 mm	V2D611D-MMSBE4	1105795
		V2D611R-MMSBE4	1117773
		V2D611S-MMSBE4	1152693
	12 mm	V2D611D-MMSCE4	1110306
		V2D611R-MMSCE4	1117772
	640 px x 480 px (0.3 MP)	6 mm	V2D610D-MMSBE4
V2D610R-MMSBE4			1117775
12 mm		V2D610D-MMSCE4	1105796
		V2D610R-MMSCE4	1117774

- **Variant:** Complete device
- **Optical focus:** teach auto focus (liquid lens)
- **Sensor resolution:** 1,280 px x 960 px (1.2 MP)
- **Illumination color:** amber, blue
- **Communication interface:** Ethernet, PROFINET, EtherNet/IP™, EtherCAT®, Serial, CAN, CANopen
- **Note:** Additional accessories may be necessary for some communication interfaces (details available online)

Focal length	Type	Part no.
6 mm	V2D611D-MLSBE5	1115203
	V2D611R-MLSBE5	1144346
	V2D611S-MLSBE5	1152603
12 mm	V2D611D-MLSCE5	1114291
	V2D611R-MLSCE5	1144345

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