



IVC-3D

Advanced 3D image processing made easy

3D MACHINE VISION

SICK
Sensor Intelligence.



Technical data overview

Technology	3D line scanning
Scan/frame rate	5,000 3D profiles/s
Light source	Internal lighting
Factory calibrated	✓
Enclosure rating	IP65 / IP67 (depending on type)
Configuration software	IVC Studio
Ethernet	✓, TCP/IP, UDP/IP
EtherNet/IP™	✓
Serial	✓, RS-422, RS-485, encoder (RS-422)

Product description

The IVC-3D smart camera performs inspection, location, and measurement of objects in order to increase throughput, control production and perform quality control. Applications that once required complicated camera and illumination technology can now easily be completed with the world's first 3D smart camera. The factory-calibrated IVC-3D combines imaging, lighting and analysis into one housing. Using laser triangulation, the IVC-3D can see three dimensions. Highlighting surface defects is done during image capture with tools that measure height, volume, and shape independent of contrast and color. As a result, previously difficult measurement tasks are now easily solved. The IVC-3D is easily configured via a PC user interface, and has serial and EtherNet/IP interfaces. The IVC-3D needs no PC after configuration.

At a glance

- Easy 3D measurement – provides information about object height, shape and volume
- Independent of object contrast and color
- Easy-to-use graphical user interface for fast application development
- Simple connection of PLCs, robots, and other control systems, e.g., those using Ethernet/IP or OPC
- Scans up to 5,000 profiles per second
- Industrial, rugged metal housing

Your benefits

- The IVC-3D makes advanced 3D shape inspections easy, enabling cost-efficient solutions
- Contrast-independent measurement provides greater reliability even at varying object color and when the object color is the same as the background
- Factory calibrated – instantly providing true metric dimensions at production speed
- The camera's OPC server and EtherNet/IP interface enables simple communication with PLCs, robots and control systems, making integration easy
- Stand-alone operation – no PC is needed after configuration

Ordering information

Other models and accessories → www.sick.com/IVC-3D

- **Scan/frame rate:** 5,000 3D profiles/s

Sub product family	Working distance	Laser class	Window material	3D profile resolution	Type	Part no.
IVC-3D 100	259 mm ... 398 mm ¹⁾	2	PMMA	2,048 points	IVC-3D51113	1050158
	265 mm ... 404 mm ¹⁾	2	PMMA	2,048 points	IVC-3D51112	1046912
			Safety glass	2,048 points	IVC-3D51111	1043579
		3B	Safety glass	2,048 points	IVC-3D51121	1046868
IVC-3D 200	300 mm ... 677 mm ¹⁾	2	PMMA	2,048 points	IVC-3D11113	1048004
	306 mm ... 683 mm ¹⁾	2	PMMA	2,048 points	IVC-3D11112	1042152
			Safety glass	2,048 points	IVC-3D11111	1027539
IVC-3D 30	208 mm ... 239 mm ¹⁾	2	PMMA	2,048 points	IVC-3D31112	1046810
			Safety glass	2,048 points	IVC-3D31111	1041205
IVC-3D 300	276 mm ... 1,147 mm ¹⁾	2	PMMA	1,400 points	IVC-3D41113	1049024
	282 mm ... 1,153 mm ¹⁾	2	PMMA	1,400 points	IVC-3D41112	1048269
			Safety glass	1,400 points	IVC-3D41111	1041204
IVC-3D 40	195 mm ... 250 mm ¹⁾	2	Safety glass	2,048 points	IVC-3D61111	1067153
IVC-3D 50	189 mm ... 273 mm ¹⁾	2	PMMA	2,048 points	IVC-3D21113	1050157
	195 mm ... 279 mm ¹⁾	2	PMMA	2,048 points	IVC-3D21112	1041710
			Safety glass	2,048 points	IVC-3D21111	1027538

¹⁾ The specified values are valid for single device installations. Please see operating instructions for details.

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