



Visionary-S

3D snapshot – colorful perspectives for precise factory automation

3D MACHINE VISION

SICK
Sensor Intelligence.



Technical data overview

Technology	3D snapshot, image analysis, color
Scan/frame rate	30 fps, Up to 9,850,000 3D data points/s ¹⁾
Light source	Internal lighting Laser, invisible, infrared, 808 nm
Factory calibrated	✓
Enclosure rating	IP67
Configuration software	SOPAS ET / Telegram interface / SICK AppManager / SICK AppStudio / Web-Interface / Telegram interface (depending on type)
Ethernet	✓ / Complete data stream combining distance and RGB values in one snapshot plus device control / ✓ / Data is application-specific or can be defined in independently-developed applications. (depending on type)

¹⁾ 0,03 s per 3D image.

Product description

Thanks to the innovative 3D snapshot technology, Visionary-S 3D vision sensors from SICK offer maximum flexibility for countless applications in factory automation. Based on the stereo vision principle, with the Visionary-S, SICK is offering solutions for the highest demands on accuracy and speed, even for stationary applications. The Visionary-S combines structured illumination with the proven technology of a color camera and delivers colorful depth images in real time. Powerful visualization tools, broad support of common programming languages and reliable 2D and 3D information make the Visionary-S the ideal solution for robotics, intralogistics and various quality assurance tasks in production, to name a few examples.

At a glance

- Up to 30 color depth images per second
- Works in absolute darkness and in daylight of up to 40 klx
- Resolution: 640 px x 512 px; depth resolution down to the sub-millimeter
- Output of 3D color data via a Gigabit Ethernet interface
- Temperature range: 0 °C ... 50 °C (depending on the housing), enclosure rating: IP67
- HDR mode

Your benefits

- Rugged cameras with a working range of 0.50 m to 6.50 m for industrial use
- More than 320,000 depth and color intensity values in a single recording
- High recording speed with very high resolution at the same time
- Flexibility: The camera can be integrated with the help of common programming languages
- High-efficiency illumination: Reliable depth data even with ambient light
- Visionary-S CX offers direct output of color and depth values via Ethernet
- Visionary-S AP is based on SICK AppSpace, which allows customers to create their own applications and load them onto the camera or use application-specific Key Apps

Fields of application

- Bin picking
- Navigation and positioning in robotics
- Quality control, e.g. of secondary packaging
- Palletizing and depalletizing
- Dimensioning of goods
- Verification, e.g. empty container detection at airports

Ordering information

Other models and accessories → www.sick.com/Visionary-S

- **Sub product family:** Visionary-S CX
- **Laser class:** 1
- **Scan/frame rate:** 30 fps, Up to 9,850,000 3D data points/s (0.03 s per 3D image.)
- **Pixel count:** 640 px x 512 px
- **Integrated application:** 2D and 3D data flow with the option of filtering data in the device
- **Detection angle:** 60° x 50°

Working distance	Type	Part no.
0.5 m ... 6.5 m	V3S102-1AAAAAA	1090184
0.5 m ... 6.5 m 0.5 m ... 65 m	V3S102-1AABAAB	1090185

- **Sub product family:** Visionary-S AP
- **Working distance:** 0.5 m ... 6.5 m, 0.5 m ... 65 m
- **Laser class:** 1
- **Scan/frame rate:** 30 fps, Up to 9,850,000 3D data points/s (0.03 s per 3D image.)
- **Pixel count:** 640 px x 512 px
- **Integrated application:** Data stream with the option of accessing data within the device. Already-finished Key Apps can be loaded onto the device and independent applications can be created.
- **Detection angle:** 60° x 50°

Type	Part no.
V3S142-1AAAAAA	1114319
V3S142-1AABAAB	1114320

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