



Industrial 3D
CAMERAS



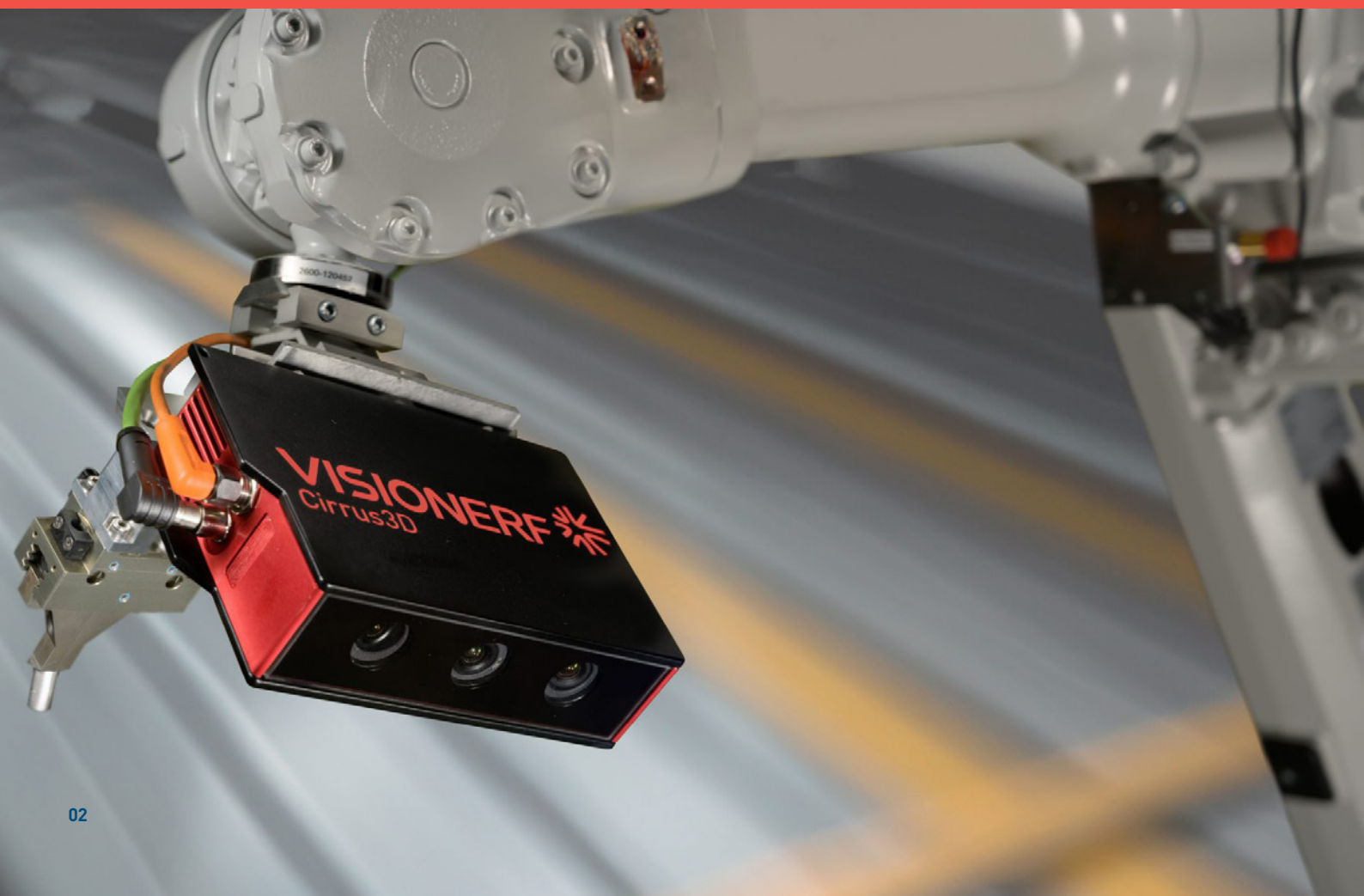
FOR MORE THAN 30 YEARS, VISIONERF HAS BEEN DESIGNING AND DEVELOPING *VISION AND IMAGE PROCESSING SOLUTIONS* FOR THE AUTOMATION OF PRODUCTION PROCESSES.

With several thousand systems installed worldwide across all sectors of industry, Visionerf has built up unparalleled experience and is now regarded as a leading player in the field of industrial vision.

Thanks to innovative developments in the design of its sensors, Visionerf has become the “go-to” partner for customers with increasingly demanding requirements.

Strengthened by its experience, Visionerf can support you in the realization of your projects, with an expert and available technical team.

High end products that will meet your needs and a know-how already recognized throughout the world.



OUR RANGE OF INDUSTRIAL 3D CAMERAS

P.6 3D STEREO SCANNER

P.8 3D STEREO LINE SCANNER

P.10 SENSOR MANAGER INTERFACE

Cirrus3D CAMERAS



Our Cirrus3D cameras are specially designed to be integrated at the heart of your system, without any special development. Used as a fixed or mobile component, the Cirrus3D enables vision/robotics applications of incomparable efficiency and very high quality. Dedicated to industrial use, Cirrus3D scanners are not sensitive to the environment, dust, dirt or variations in brightness, guaranteeing unrivalled reliability and robustness of your installations (IP 65).



**CIRRUS 3D SENSORS CAN BE
USED WITH ANY SOFTWARE:**



...



YOUR SOFTWARE

We can tailor the communication protocol to your software, thanks to the available SDK.

Compatible with



"MADE BY" VISIONERF



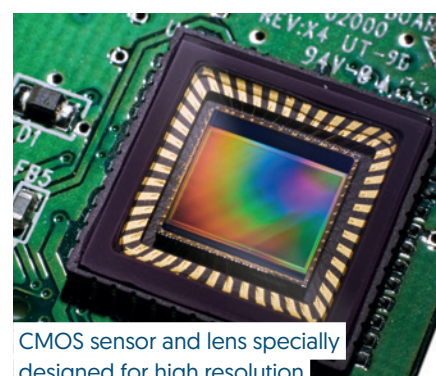
Waterproof industrial connectors



High-performance cooling



Integrated high-performance processor for calculating 3D points



CMOS sensor and lens specially designed for high resolution



ADVANTAGES Intended for use in industry, these scanners are **impervious to their environment, to dust, and to variations in light conditions**, ensuring your installations benefit from **peerless reliability and robustness** (IP 65). Assembly, inspection, identification, bin picking, metrology, localization of single or bulk parts: these are just some of the industrial applications where it can also be mounted on a robot. **The Cirrus3D range can offer you a great return on your investment.**



WHY CHOOSE A VISIONERF CAMERA?

Since the first-generation Cirrus3D camera was launched in 2015, Visionerf has constantly improved its products to provide customers with a high-end scanner capable of operating in the harshest environments, such as foundries or dusty, humid environments.

The unique design of this camera, based on the principle of high-resolution stereoscopy, enables very small elements to be viewed with the utmost precision in the shortest possible time. Combined with powerful structured light, the quality of information remains constant across a wide range of materials. From black to high-gloss, measurement reliability remains flawless.

The choice of top-of-the-range components contributes greatly to the robustness and reliability of our products.



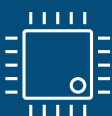
FOR WHAT USES?

Today, our cameras are used in all sectors of activity, for precise handling of parts of all sizes (screws, mechanical bodywork parts), for robot guidance in high-volume applications (from automatic detection of potential gas leaks on refrigerators to automatic changeover of drilling tools on giant tunnel boring machines), and for monitoring and inspecting objects directly on production lines.

3D STEREO SCANNER



**COMPACT,
ROBUST AND LIGHT**



**POWERFUL
PROCESSOR**
for the calculation of 3D points



INDUSTRIAL CONNECTORS
power supply and Ethernet



CMOS SENSOR
up to 30µm



HIGH PROTECTION RATING
and cooling system



**IMPERVIOUS
TO DUST AND DIRT**
can adapt very easily to
difficult environments
(IP65 standard)



CALIBRATION
in factory



LASER LIGHT
for better precision
on shiny parts

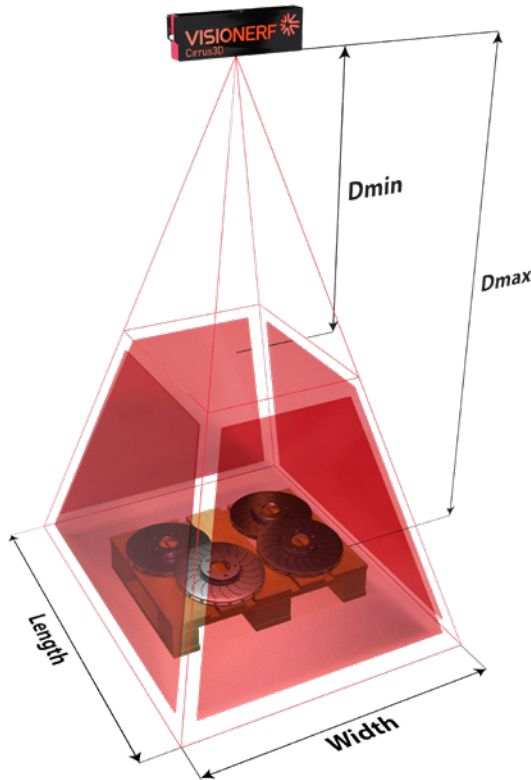


An innovation in the compact 3D camera range, the Cirrus3D's laser scanning allows it to **scan parts with excellent resolution, even on shiny or matte parts.**

STANDARD FEATURES ON ALL MODELS

Scanning time	From 0,2s
Number of 3D points per scan	Up to 5 million
Image processing software	Option
Calibration	In factory
Communication interface	TCP/IP (SDK or GiGE VISION)
Housing material	Aluminium
Connectors	Power supply and inputs/ outputs, Ethernet M12
Power supply	24V/2A
Light source	Blue laser / Selectable class 2 or 3R
Operating temperature	0 °C...50 °C / 32 °F...122 °F

THE WIDEST RANGE OF 3D SENSORS



The resolutions indicated correspond to the minimum distance between two 3D points.

The standard deviation is calculated on the variation in position of a 25 or 50 mm diameter aluminium sphere over 50 successive scans.

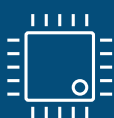
Dmin and Dmax are the minimum and maximum distance between Cirrus3D and scanned volume

Scanners	Cirrus3D 100 SCLA	Cirrus3D 150 SCLA	Cirrus3D 300 SCLA	Cirrus3D 600 SCLA	Cirrus3D 610 SCLA	Cirrus3D 800 SCLA	Cirrus3D 1200 SCLA	Cirrus3D 1600 SCLA
Dimensions (L x W x H)	195x53x131mm	195x53x131mm	269x53x131mm	389x53x131mm	269x53x131mm	439x53x131mm	599x53x131mm	749x53x131mm
Dmin	150mm	215mm	410mm	800mm	800mm	1020mm	1600mm	2040mm
X/Y resolution at Dmin	0.06mm	0.08mm	0.15mm	0.30mm	0.30mm	0.38mm	0.60mm	0.77mm
Z resolution at Dmin	0.03mm	0.05mm	0.10mm	0.23mm	0.37mm	0.32mm	0.53mm	0.67mm
Standard deviation at Dmin	2µm	3µm	6µm	10µm	15µm	15µm	25µm	30µm
Width at Dmin	100mm	140mm	285mm	530mm	530mm	650mm	1050mm	1350mm
Length at Dmin	120mm	170mm	330mm	640mm	640mm	800mm	1250mm	1650mm
Dmax	185mm	285mm	580mm	1350mm	1350mm	2000mm	4000mm	5000mm
X/Y resolution at Dmax	0.07mm	0.10mm	0.21mm	0.49mm	0.49mm	0.72mm	1.43mm	1.79mm
Z resolution at Dmax	0.04mm	0.08mm	0.19mm	0.62mm	1.03mm	1.12mm	3.02mm	3.62mm
Standard deviation at Dmax	3µm	4µm	8µm	15µm	20µm	20µm	40µm	50µm
Width at Dmax	125mm	180mm	360mm	750mm	750mm	1100mm	2000mm	3000mm
Length at Dmax	150mm	220mm	460mm	1000mm	1000mm	1400mm	2700mm	4000mm
Weight	1.9kg	1.9kg	2.3kg	3.3kg	2.3kg	3.8kg	5kg	6.3kg

3D STEREO LINE SCANNER



**COMPACT,
ROBUST AND LIGHT**



**POWERFUL
PROCESSOR**
for the calculation of 3D points



INDUSTRIAL CONNECTORS
power supply and Ethernet



CMOS SENSOR
up to 30µm



AIR COOLING SYSTEM



**IMPERVIOUS
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can adapt very easily to
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CALIBRATION
in factory



LASER LIGHT
for better precision
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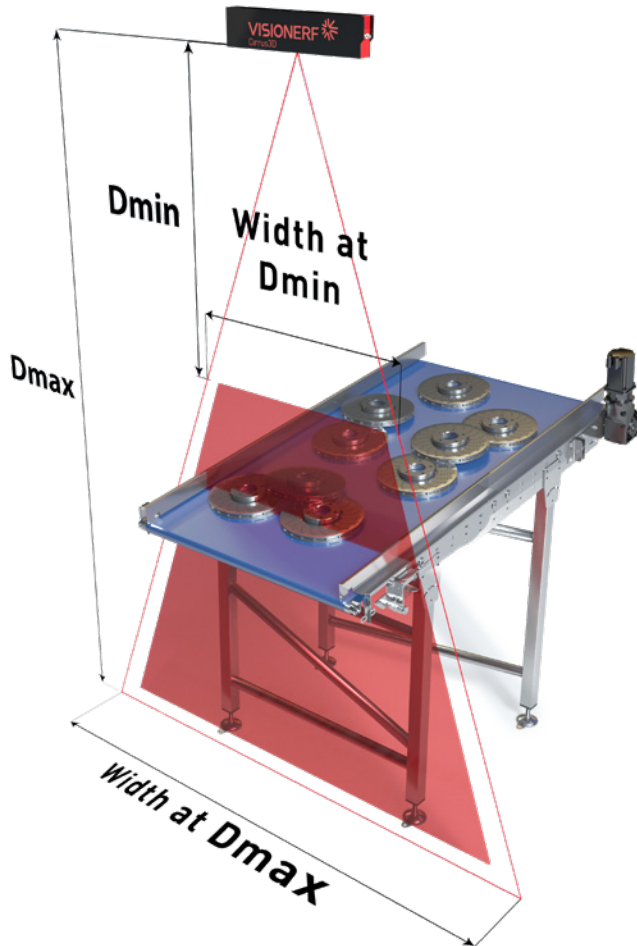


The Cirrus3D is also available for scanning moving parts, such as on a conveyor (up to 250 mm/s) or on a rotating system. **Detect the defect of your parts in the blink of an eye!**

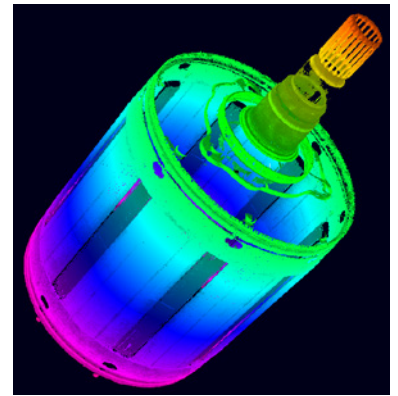
STANDARD FEATURES ON ALL MODELS

Scanning speed	Up to 1,000 3D profiles/s
Number of 3D points per profile	2,500
Image processing software	Option
Calibration	In factory
Communication interface	TCP/IP (SDK or GiGE VISION)
Housing material	Aluminium
Connectors	Power supply and inputs/ outputs, Ethernet M12
Power supply	24V/2A
Light source	Blue laser / Selectable class 2 or 3R
Operating temperature	0 °C...50 °C / 32 °F...122 °F

THE WIDEST VOLUMES OF WORK ON THE MARKET



Option:
360° Scan of
rotating parts



The resolutions indicated correspond to the minimum distance between two 3D points.

The standard deviation is calculated on the variation in position of a 25 or 50 mm diameter aluminium sphere over 50 successive scans.

Dmin and Dmax are the minimum and maximum distance between Cirrus3D and scanned volume

	Cirrus3D 100 STLA	Cirrus3D 300 STLA	Cirrus3D 500 STLA	Cirrus3D 1000 STLA	Cirrus3D 1500 STLA
Dimensions (L x W x H)	195x53x131mm	269x53x131mm	389x53x131mm	599x53x131mm	749x53x131mm
Dmin	150mm	410mm	630mm	1280mm	1850mm
X/Y resolution at Dmin	0.06mm	0.15mm	0.24mm	0.49mm	0.70mm
Z resolution at Dmin	0.03mm	0.10mm	0.15mm	0.35mm	0.56mm
Width at Dmin	120mm	330mm	500mm	1000mm	1500mm
Dmax	185mm	580mm	1000mm	3000mm	4000mm
X/Y resolution at Dmax	0.07mm	0.21mm	0.37mm	1.08mm	1.44mm
Z resolution at Dmax	0.04mm	0.19mm	0.35mm	1.7mm	2.34mm
Width at Dmax	150mm	460mm	750mm	2200mm	3000mm
Weight	1.9kg	1.9kg	3.3kg	5kg	6.3kg

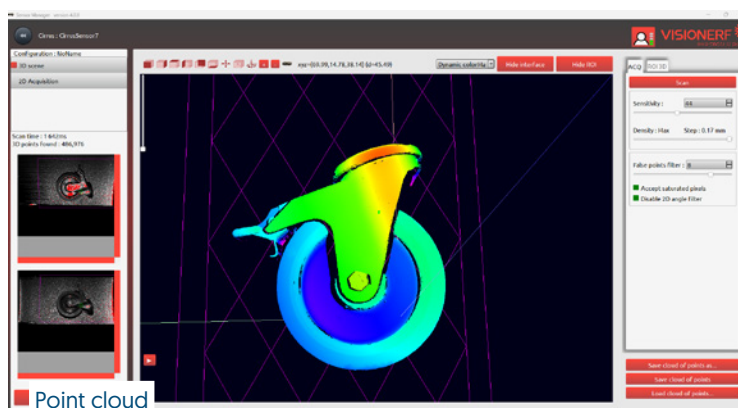
SENSOR MANAGER



A simple and intuitive configuration software available for Windows or Linux systems in just a few steps!



Highly dynamic sensor for digitalizing work scenes involving matte or shiny parts or those consisting of multiple materials.



Actual part

NOTES



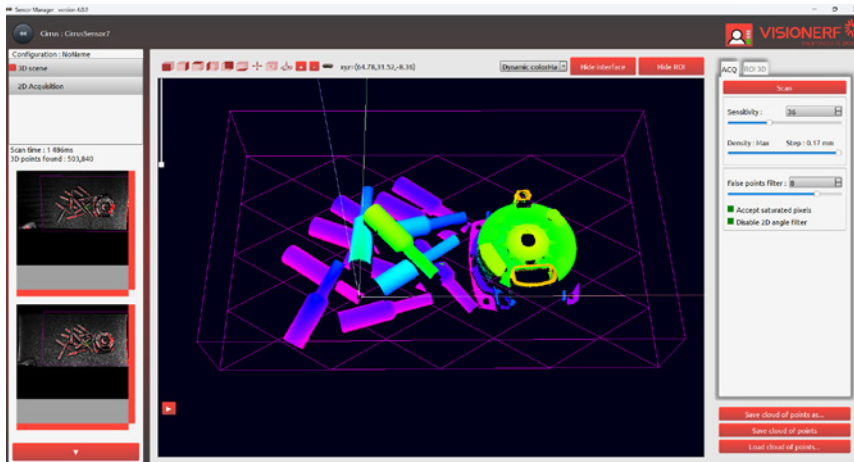
1

Take a scan of your parts to get a first impression.



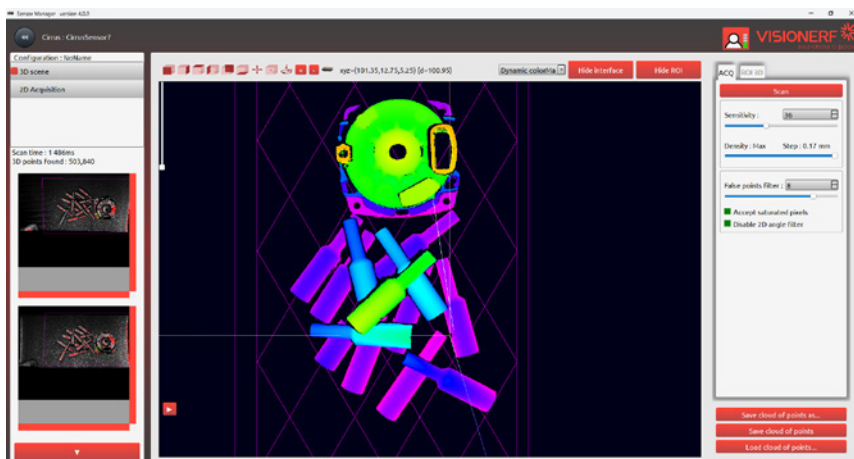
2

Set the 3D point density, sensitivity and dynamic range using sliders.



3

Save scanning time by setting up the work area.



VISIONERF, YOUR WORLDWIDE SUPPLIER



CONTACT US

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