VISOR® Multishot
Minimal height differences in full view.

Vision Sensor
VISOR V20
Allround

sensoPART

VisionSystems
DESIGN
2017 Innovators
Awards
SILVER

VISOR® Multishot
A clear view of previously invisible details.
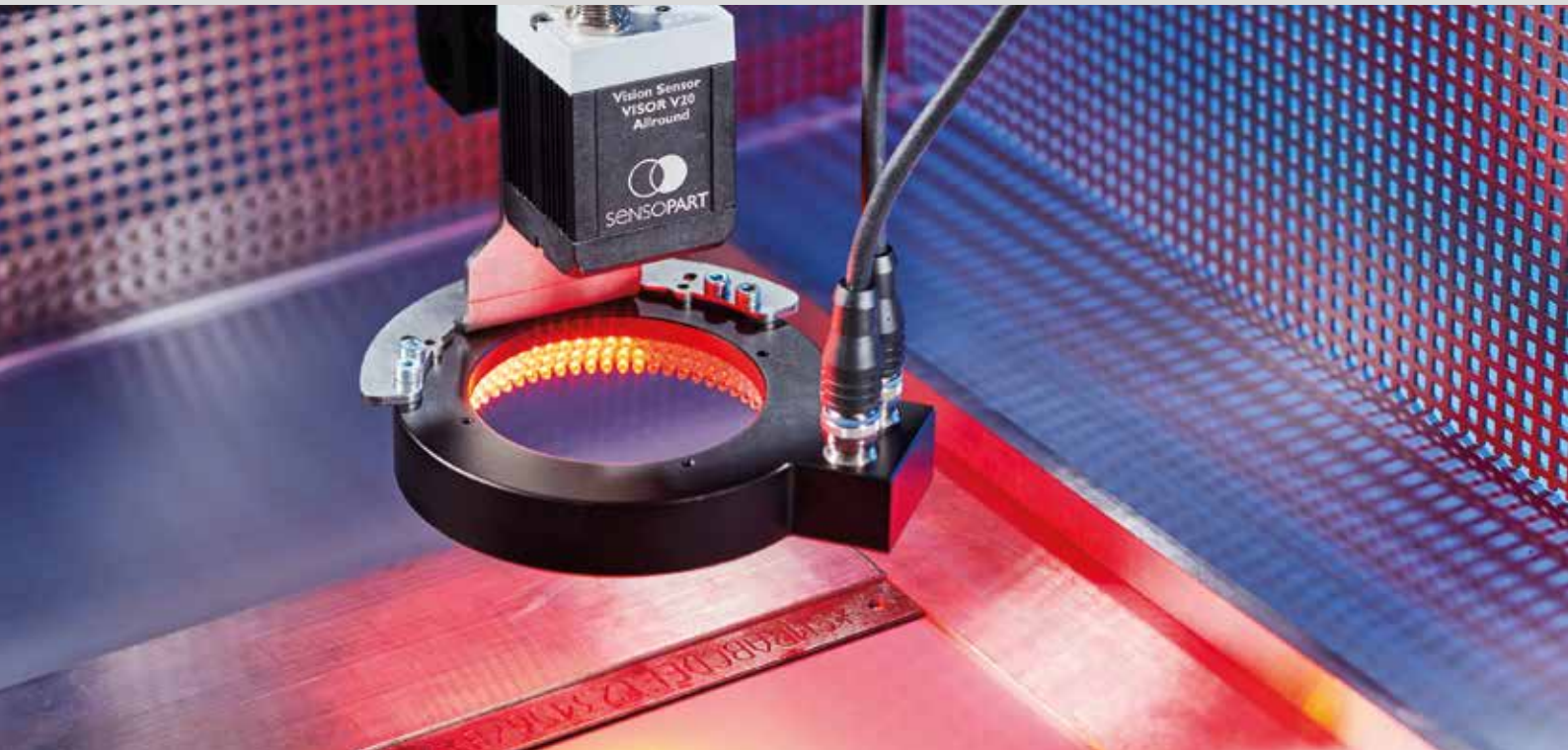
Raised or recessed object details – such as embossed digits and characters on a credit card – are difficult to detect with standard image processing methods. Even use of lateral lighting generally results in poorly identifiable contours due to overexposure and shadows. The solution comes in the shape of SensoPart's VISOR® vision sensor series with the new multishot function.

Contours now stand out clearly so that raised or recessed letters and digits can be easily read, e.g. using the vision sensor's OCR function. Other application examples for VISOR® Multishot include the reading of data matrix codes moulded directly into plastic surfaces, detection of damage such as dents or scratches, or the recognition of raised adhesive beads on the same colored background.

This technology can even be used exclusively with the VISOR®'s internal lighting system – a feature which makes the sensor unique on the market. External lighting can be dispensed with altogether when detecting small details, particularly from a short distance. This reduces complex cabling and saves time, space and of course money.

Changing background colors – a frequent occurrence in the packaging industry – can be eliminated entirely from image processing thanks to multishot technology. Analysis is then based solely on detected height differences.

Finally, a VISOR® equipped with the multishot function can also take and analyze a picture with a standard lighting configuration, in addition to a height image, as it is possible to simply switch between multishot and standard lighting at any time. This therefore also enables part inspection with traditional image processing tools, such as pattern matching, contour detection, distance measurement or code reading.

The optional multishot ring light with four area lights is available as a pre-mounted accessory. The multishot function is now available in all new VISOR® devices in the version 'Allround Professional'.
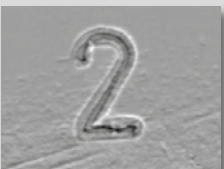
VISOR® Multishot

VISOR® V20 Allround Professional. Position tracking: pattern matching, contour, edge detection. Detectors: barcode, data code, OCR, contour, contrast, brightness, grey thresho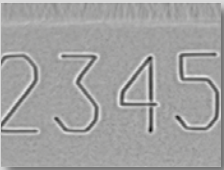ld, calliper, Blob. 255 jobs with 255 detectors, 10 IO channels, encoder input, interface to IO-Box, RS232, RS422, Ethernet, EtherNet/IP, PROFINET

536-91040	V20-ALL-P2-W12	Focal length 12 mm, white LEDs
536-91041	V20-ALL-P2-R12	Focal length 12 mm, red LEDs
536-91042	V20-ALL-P2-I12	Focal length 12 mm, infrared LEDs
536-91043	V20-ALL-P2-C	C/CS mount

with multishot

VISOR® Multishot Illuminations

Image	Type	Description/Application	Image original	with Multishot
	Internal Illumination	For small parts, distance < 50mm, like detection of single characters		
	LM300 WWK-24Q4-2L12 LM300 RWK-24Q4-2L12 LM300 IWK-24Q4-2L12	Very powerful setup for applications with big fields of view like DMC-codes molded directly in plastic		
	LM100 WWK-24Q4-2L12 LM100 RWK-24Q4-2L12	Ring light, angled, 100 mm, for OCR-reading of fonts or DMC-codes with thin lines engraved in iron sheets		
	LM325 RD-24Q4-kML5	Diffuse DOME 325 mm, for detection of scratches on very shiny parts		

We look ahead

Yesterday, today and in the future

"We gauge ourselves not by what is possible today, but by our vision of what can be achieved" – this has been our motto since the foundation of SensoPart in 1994. Our goal is to always be a step ahead and to be able to offer our customers the most innovative sensor for industrial automation.

With our easy to integrate VISOR® Vision sensors and our compact laser sensors with an amazing background suppression made in Germany, we stick up to this motto.

Get ready – we still have a lot of ideas for the future.

SENSOR TECHNOLOGY

Light barriers	Vision sensors
Proximity switches	Smart cameras
Laser sensors	Vision systems
Miniature sensors	Object detection
Distance sensors	Object measurement
Color sensors	Color detection
Contrast sensors	Code reading
Anti-collision sensors	Lighting
Slot sensors	Lenses
Fibre-optic amplifiers	
Inductive sensors	
Capacitive sensors	
Ultrasonic sensors	