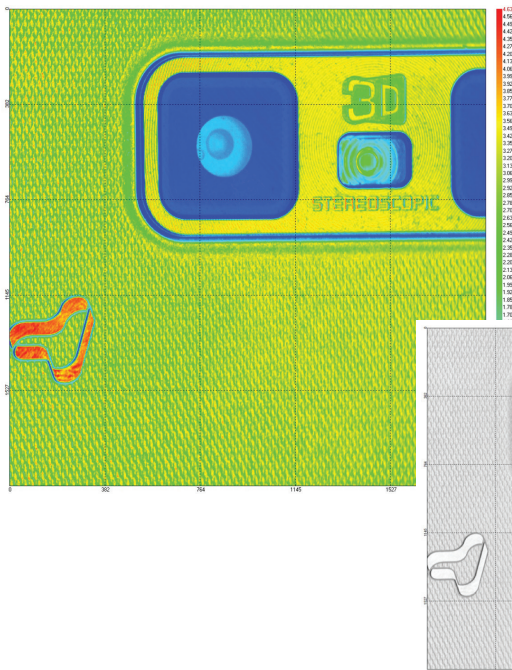
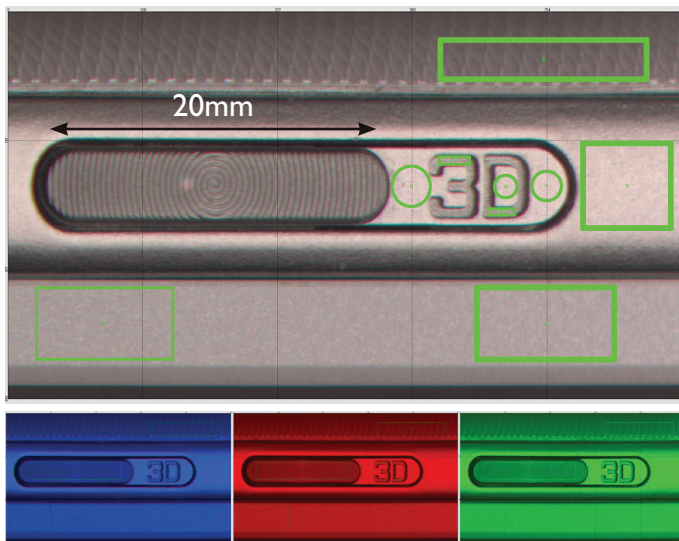


The Non-Contact VGC-100 allows to measure color & gloss properties of reflective materials (optimized for high gloss). Its off-axis objective associated with a high resolution video-colorimeter offers an advanced way to measure gloss & color with a very high spatial resolution. Different LED based illuminations can be provided to adapt the illumination conditions the sample characteristics. The system allows the qualification of small parts which cannot be measured with conventional spherical spectrometers.



True 14 bit Cooled CCD sensor

- Specific off-axis objective at 25° incidence
- Color filters adjusted to sensor response
- Color (xYz, Lu'v', Lab, Lab, E94, ..)
- Absolute Integrated Gloss
- High spatial resolution (down to 10*10µm)
- Controlled LED illumination

Today the spherical spectrometers technologies can be limited by their lack of spatial resolution & illumination methods.

ELDIM proposed a new way to efficiently measure the integrated gloss and the color – not only as an average value of a wide measuring area. Full maps of the Lightness and the Color properties can be obtained easily.

Small parts or complex materials can be easily characterized for R&D purposes or production sorting.



Key points	Applications
Imaging camera with high end telecentric lens	QC or production lines
Ability to measure very small parts	Plastics, paints & coatings, inks, textiles, colored metals...
Non-contact measurements	Design, packaging, photo, prepress & printing ...
Highly flexible	Lightness, Color and Mechanical dimension

Specifications		VGC-100
Mechanicals	Overall size (mm) Weight (Kg)	800x455x530 35
CCD Sensor	Cooled Resolution	Yes 8M pixels
Imaging Optics	Field size (mm)	39x36mm
Accuracy	Luminance Chromaticity (x,y) Integrated Gloss	$\pm 3\%$ ^(*1) ± 0.003 ^(*1) $\pm 3\%$ ^(*4)
Short-term Repeatability	Luminance Chromaticity Integrated Gloss	$\pm 0.05\%$ ^(*2) 0.0001 ^(*2) $\pm 0.1\%$ ^(*2) ^(*4)
Measurement time	One luminance measurement One color measurement	<10s ^(*3) <30s ^(*3)
Illumination	Technology Spectral type Geometry	LED based RGB LEDs Specular Diffused (optional)
Using Conditions	Operating Temperature Operating humidity	10-35°C 20-70% non condensing

(*1) Based on white LED illuminant

(*2) Based on a virtual sensor size of 100 pixels

(*3) Based on a sample with a mean reflectance higher than 10%

(*4) To be confirmed

Outer dimension (unit mm)

