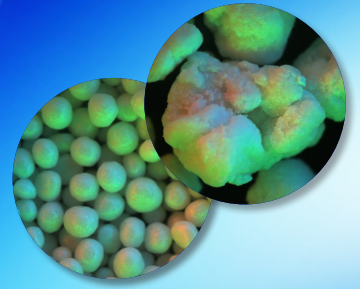




## Eyecon<sub>2</sub><sup>TM</sup>

### Direct Imaging Particle Analyzer



The Eyecon<sub>2</sub> is a non-product contact, real time particle size and shape data analyzer that utilizes cutting edge Artificial Intelligence (AI) to measure powders and bulk solids between 50 – 5500 µm. The non-product contact image analysis method reduces risk and minimizes install. Capture real-time data In-line or At-line, implement automated process control, drive-down production costs and drive-up product quality.

Used the world over for smart In-line particle size process monitoring, the Eyecon<sub>2</sub> is the perfect solution to optimize the production process.

Support includes application consultation, design and manufacturing of interface solutions, data integration, training, Installation and Operational qualification. No obligation suitability assessments, free sample analysis and pathways for equipment trials are available. The evaluation process can include required longer term project-based trials as well as short term proof of principle demonstrations. Process suitability assessment is provided, along with a high level of implementation



support for successful integration on equipment such as granulators, mills, and spheronizers.

Eyecon<sub>2</sub> is installed in-line on many types of process equipment but can also be configured for At-line/ Benchtop Analysis. The transition from benchtop to in-line integration allows the technology implementation to evolve for whatever is needed.

## Reduced cycle time, increased yields, process control

- Tried and tested through installations around the world on Fluidized Bed Coating (e.g. Wurster), Fluidized bed Granulation/Drying, Twin Screw Granulation, Dry Granulation/Roller Compaction, Extrusion Superiorization, Milling, Blending, and product transfer process equipment.
- Uses direct imaging processed in real-time, with shape and size information reported back, highlighting variations and trends in data.
- Continuous automated monitoring of critical quality attributes (CQA) delivers insights that were previously missed or spoiled by sample analysis.
- Convert CQA data into a data-driven control strategy to drive critical process parameters (CPP) settings.
- Non-product contact to ensure proper measurements every time, no contamination or product interaction.

# Specifications

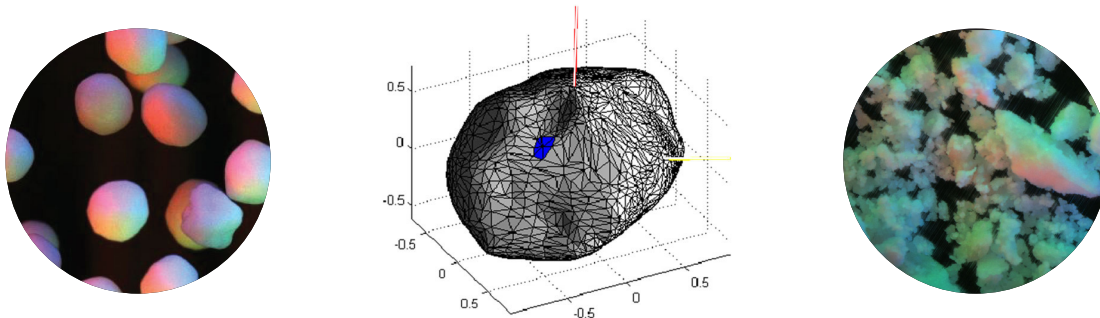
Measurement	
<b>Size Range</b>	50 - 5500 $\mu\text{m}$
<b>Principle Measurement Method (non-product contact)</b>	Direct Imaging
<b>Size Measurement Data</b>	D10, D25, D50, D75, D90 in numeric and volumetric with Mean and Median values all trended in real time with live histogram and S-curve results. Includes process deviation alarm.
<b>Shape Measurement Data</b>	Eccentricity Average, Eccentricity RSD, Range 0-1
<b>Exportable Data</b>	PDF report of recording session, CSV file with data on every image analysed with full PSD from D5-D95, captured images exportable as JPEG.
<b>Data Processing</b>	EyePASS™ real time particle analysis software installed on a dedicated IPC/PC/Laptop with Windows 10.
<b>Measurement Time</b>	~5 seconds per image
<b>Material Speed (max.)</b>	≈ 10 m/sec

Imaging	
<b>Illumination source</b>	12x3 High intensity, low energy RGB LEDs
<b>Image Area</b>	11.25 mm x 11.25 mm
<b>Pixel Size</b>	5.5 $\mu\text{m}$ x 5.5 $\mu\text{m}$
<b>Resolution</b>	2046 px x 2046 px
<b>Sensor</b>	CMOS

Software	
<b>GMP</b>	EyePASS is both 21 CFR part 11 & GAMP5 Compliant
<b>Communications</b>	EyePASS is Open Platform Communications compatible with OPC UA & OPC DA 3

Physical	
<b>Dimensions &amp; Weight</b>	250 x 128 x 132 mm (4 kg)
<b>Power</b>	230VAC @ 50HZ / 110VAC @ 60HZ
<b>Casing Materials</b>	304 Stainless steel, Glass window, Silicon gaskets

Conformance & Certifications	
<b>CE Marking</b>	EU declaration of conformity
<b>ATEX Certified</b>	The Eyecon <sub>2</sub> is suitable for ATEX zones 2/22, IP65.
<b>IECX Certs</b>	International Electrotechnical Commission Explosive Standards certification available upon request.



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