

QICPIC/S Series | Dynamic Image Analysis

Particle Measurement | Laboratory

Size & Shape | Dry & Wet | Precise & Flexible



Innovation

High-performance Image Analysis with up to 20 Megapixels and 950 Frames per Second

Higher Imaging Performance, Greater Flexibility and Advanced Particle Evaluation

Evolution of the QICPIC Family

The **QICPIC/S Series** combines high-resolution camera technology with optimised precision lenses and flexibly selectable frame rates. Up to 20 megapixels enable detailed capture of particle contours. Depending on the selected resolution, frame rates of up to 950 frames per second can be achieved.

Thanks to the optimised camera technology, particle size and shape can be determined reliably. With the measuring range S, particles below 1 µm can also be detected in dry measurements.

The larger camera sensor extends the field of view. Depending on the application, this enables either a wider detection range or a reduction in the required sample quantity.

Flexible Measuring Ranges and System Configuration

The predefined measuring ranges XS, S, M and L enable resolution, detection range and frame rate to be matched to the requirements of the respective measurement task. High resolutions support detailed analysis of particle contours, while high frame rates enable the rapid capture of large particle populations. Individual definition of the image area (Region of Interest) remains possible.

Optimised precision lenses make efficient use of the high resolution of the camera across the entire sensor area. **QICPIC/S** covers the entire particle size range from 0.5 µm to 34,000 µm with only four predefined measuring ranges.

The proven modular system architecture has been retained. A variety of dry and wet dispersion solutions with tailored measurement ranges are available for various measurement tasks.

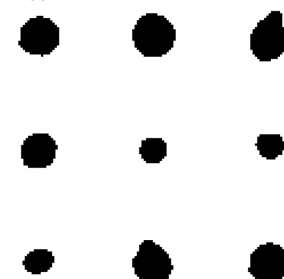
- › dry | **RODOS, GRADIS, FIBROS**
- › wet | **LIXELL, FLOWCELL, SUCELL**
- › new for **QICPIC/S** | wet | **QUIXEL**
- › dry & wet | **OASIS**

Advanced Image Evaluation

PAQXOS reliably determines particle contours even under challenging imaging conditions and enables the separate evaluation of closely adjacent particles.

Precise contour detection provides the basis for determining a wide range of particle size and shape parameters. Defined analysis

PAQXOS



Precise size and shape parameters

criteria support consistent evaluation of the detected particles.

Representative greyscale images support the visual assessment of particle detection while enabling optimised use of storage capacity. Flexible evaluation modes and volume-based particle models continue to support comparability with classical sieve analysis.

QICPIC/S Series with QUIXEL



Extended measuring range with fewer optics

QICPIC/S Series | Specifications

Measuring ranges	› XS	0.5 - 2,472 µm
	› S	0.9 - 4,120 µm
	› M	1.8 - 8,241 µm
	› L	6.9 - 30,907 µm
Resolution	4,512 x 4,512 px	
Pixel size	2.74 x 2.74 µm²	
Weight Dimensions (L/W/H)	appr. 25 kg 763 / 302 / 383 mm	
	QICPIC/S 02	QICPIC/S 06
Frame rate fps	35 @ 20 MP	80 @ 20 MP
	160 @ 4.2 MP	390 @ 4.2 MP
	400 @ 1.5 MP	950 @ 1.5 MP
Data rate	12.5 GBit/s	25 GBit/s
Interface	1 x CXP-12	2 x CXP-12

PAQXOS Control and Evaluation Software

Evaluation modes | Image analysis

- › Particle size: Equivalent circle and perimeter, enclosing circle, inner circle, enclosing rectangle, feret diameter, chord length ...
- › Particle shape: Sphericity, aspect ratio, convexity, roundness ... fibre characterisation ...
- › Volume-based models: Sphere, cylinder, ellipsoid
based on selected dimensions

