

CX300 Optical Particle Analysis Instrument

For the detection of fluorescent-labelled particles in liquid across wide size ranges and particle densities.

The CX300 is a compact, high-sensitivity fluorescence detector used for research, tailored particles, dispersions formulation and quality control development in pharmaceutical processing.



Applications

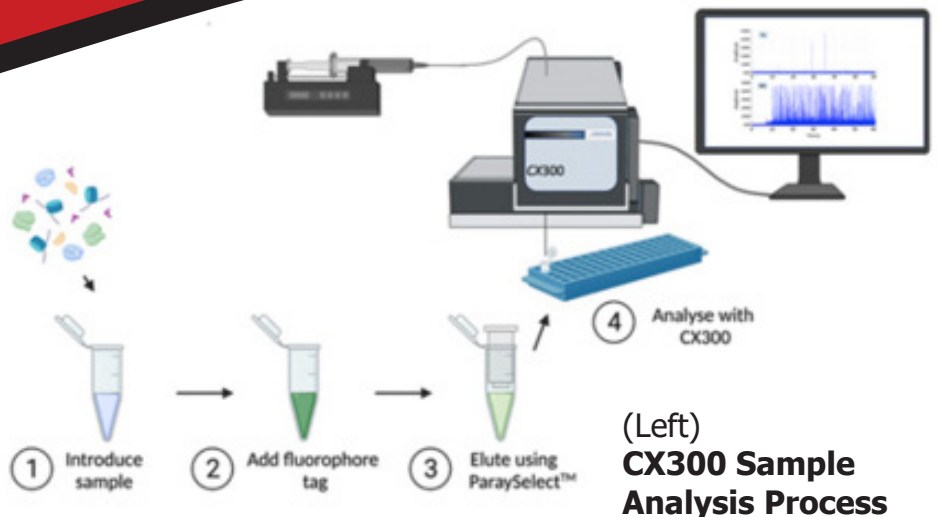
- Viruses & Bacteria detection
- Haematology
- Cancer cells detection
- Aggregations, particle size & purity (QC)
- Vaccines
- Gene therapies
- Active substances
- Medicinal products
- Cosmetics

Performance

- ✓ Flexible fluidics
- ✓ Typical sample flow rate 20 $\mu\text{L}/\text{min}$ (by syringe pump or similar)
- ✓ Picomolar sensitivity for fluorescein and AlexaFluor 488
- ✓ Data points every 0.2 ms
- ✓ Customisable to different fluorophores
- ✓ Small footprint, light-weight & transportable
- ✓ Intuitive software
- ✓ Affordable

Nanoparticle Characterisation

- 10 nm to 20 μm
- 100 – 100,000 particles/mL
- Small sample volume 100 μL
- Rapid test (< 10 minutes)
- Easy-to-use



Technical

The CX300 is a compact, high-sensitivity fluorescence detector for particle counting and quantification in flow-through capillaries.

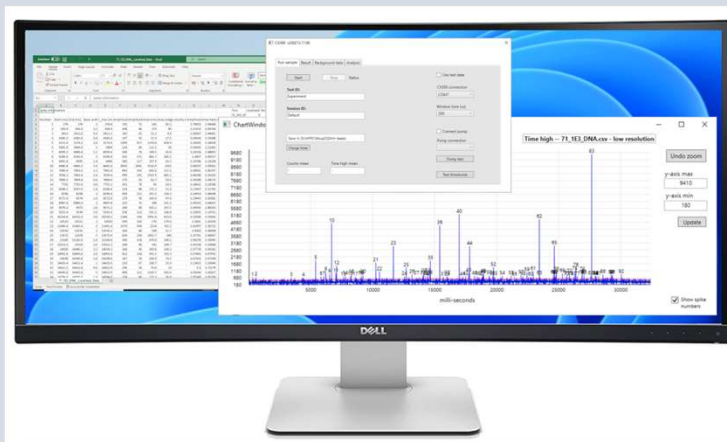
- Flow cytometry without complex fluidics
- Data points every 0.2 ms
- Picomolar sensitivity for fluorescein and AlexaFluor 488
- Fused silica capillary, 360 µm OD, 50 – 200 µm ID.
- Detection of fluorophore-labelled single particles 20 µm to 100 nm size
- Overall Size 225 mm x 145 mm x 170 mm
- Mass: 2.0 kg
- Power Requirement: 100-240 V, 50/60 Hz, 1.7 A

Wide application range:

- Detection of particles sized from nanometre to micrometre
- Customisable to different fluorophores
- Miniaturised, low-cost instrument
- Connectivity - USB Cable
- Operating Temperature 0 to +40C
- Operating Humidity
- Sensitive to condensation
- Simple, robust design

In the box:

- CX300 instrument
- Power Supply
- USB Cable
- Software



The software

The software enables instrument control and saves raw data in a standard CSV file format, allowing interrogation by other proprietary applications as well as built-in bespoke analysis algorithms, which generate parameters, including:

- Number of peaks, individually identifiable with timings, amplitudes and peak areas
- Sums of the amplitudes and the areas of the peaks
- The average width and standard deviation of peak width (to correlate with the expected size and velocity range for particles)

Custom-made functions can be added to suit specific experimental applications



Registered in England No. 05341664

Manufactured by Paraytec, distributed in the UK and Ireland by **analytik**.