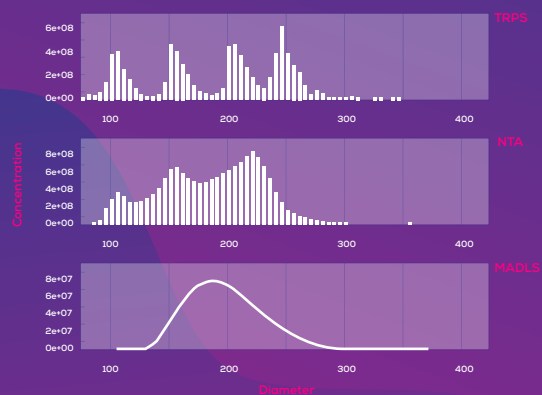## CONFIDENTLY RESOLVE SUBPOPULATIONS IN HETEROGENOUS SAMPLES

The single-particle nature of tunable resistive pulse sensing (TRPS) enables deep insights into the physical characteristics of particles in heterogenous samples.

In contrast with NTA and MADLS, TRPS clearly identified all four subpopulations in a quadrimodal sample of polystyrene particles (100, 150, 200, 240 nm).

Adapted from Vogel et al. (2021). Measuring particle concentration of multimodal synthetic reference materials and extracellular vesicles with orthogonal techniques: Who is up to the challenge? Journal of Extracellular Vesicles. 10 (3). doi: 10.1002/jev2.12052

ACHIEVE PRECISE INSIGHTS INTO THE PHYSICAL CHARACTERISTICS OF BIOLOGICAL NANOPARTICLES

EXOID SPECIFICATIONS

Footprint	300 x 300 mm
Weight	10.8 kg
Height	250 mm
Analysis Range	40 nm to 11 μm
Concentration Range	1E5 to 1E11 / mL *(size dependent)*
Electrolyte properties	Physiological

THE EXOID
THE NEW GENERATION OF TRPS
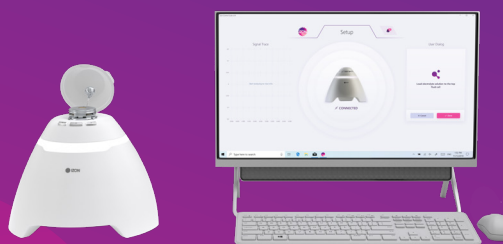
ACHIEVE SHARP RESOLUTION WITH SINGLE-PARTICLE ANALYSIS

The Exoid utilises Tunable Resistive Pulse Sensing (TRPS) to provide a measure of nanoparticles in the 40 nm to 11 μm range, including extracellular vesicles.

After calibration with a known standard, the transient change in current is monitored as particles pass one-by-one through a tunable nanopore, allowing measurements of size and concentration or size and zeta potential.

THE EXOID: SUCCESSOR OF THE qNANO

Pressure, voltage and pore stretch can now be adjusted directly from your connected device.

Significant hardware improvements reduce noise levels significantly over the qNano, meaning that smaller particles can be measured more reliably.

The clean new user interface provides guidance throughout the setup and measurement process.

WHY USE TRPS?

- TRPS is a true single-particle measurement technique that provides far greater resolution over ensemble techniques.

- Reproducibility is enabled through the use of standardised NIST-traceable calibration particles.

- Automated data processing is achieved via a user-friendly data visualisation interface.

- Unlike other techniques, TRPS measurements do not rely on prior knowledge of the optical properties of particles or the dispersant.

- Parameters are adjusted to maximise the signal-to-noise ratio and are monitored during calibration and sample measurement to ensure high-quality data.