# DIANT® LARU The Benchtop R&D System

The DIANT® approach to the continuous processing of nanoparticles is designed to serve as a leading technology solution in its field. Featuring patented turbulent jet technology and advanced analytical capabilities, the DIANT® LARU enables precise control over particle size, uniformity, and quality, speeding time-to-market and facilitating seamless pilot and commercial scaling.

Lipid Nanoparticles (LNPs)

Liposomes

Nucleic Acid/Lipid Complexes

Polymeric Micelles

Suspensions

## **DIANT® LARU Specification**

Max Output Flow: 400 ml/min Solvent Flow Rate: 20 mL/min

Flow Rate Ratio: 2-8

Produces nanoparticles of various sizes: ~25 d.nm to

>500 d.nm

Collects volumes as low as 20 mL (short runs)



## DIANT® Jet Technology for Highest Throughput

The DIANT® LARU is a low flow rate, low dead volume system for continuous nanoparticle processing. To precisely combine genetic material/API in buffer with lipids in solvents, all DI-ANT® systems use the patented DIANT® jet mixer, facilitating seamless scale-up from R&D to commercial manufacturing.

## Continuous Manufacturing

Continuous nanoparticle processing for long and short runs

## Continuous, Single-Pass Platform

Additional inline modules transform the powerful DIANT® LARU into a state-of-the-art single-pass, closed, continuous process

#### Ease of Use

Standard connections for bottles, tubes, or 2D bags

#### Inline Process Analytical Technology

The ground-breaking InProcess-LSP NanoFlowSizer,™ uses SR-DLS to offer non-invasive, accurate particle size measurements

## Multiple Program Options

Create and store runtime recipes to produce particles at different flow conditions and for set durations

## Temperature and Sensors

Control the temperature of your sample by adding a TCU along with other custom-integrated sensors to monitor pH and conductivity

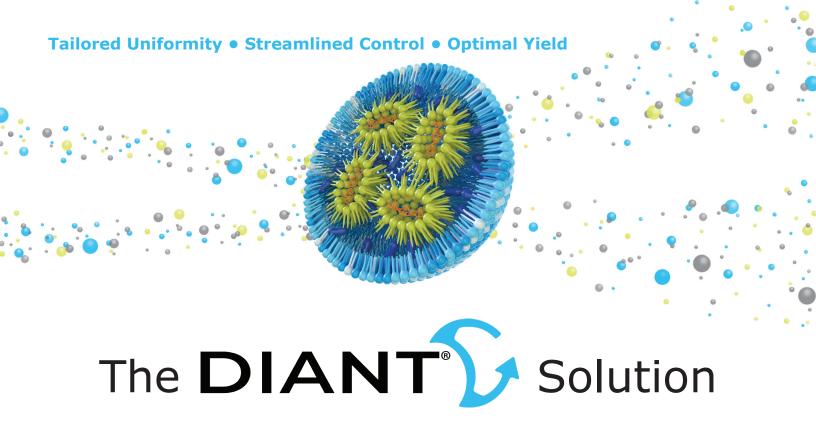
## Tangential Flow Filtration

The 2TFF uses a proprietary multi-stage tangential flow filtration system to reduce biofouling and allow for long runs

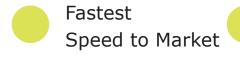
#### Intravesicular & Extravesicular Modifications

The DIANT® IEM is a continuous processing system for the controlled modification of pre-formed vesicular nanoparticles



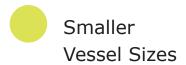


## Continuous Processing Technology that provides

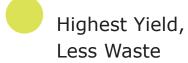












We appreciate your interest in DIANT's unmatched processing technology and are looking forward to partner with you to bring your nanoparticle processing to the next level!

### **DIANT PHARMA INC.**

130 Utopia Rd.
Manchester CT, 06042
USA
info@diantpharma.com
www.diantpharma.com

