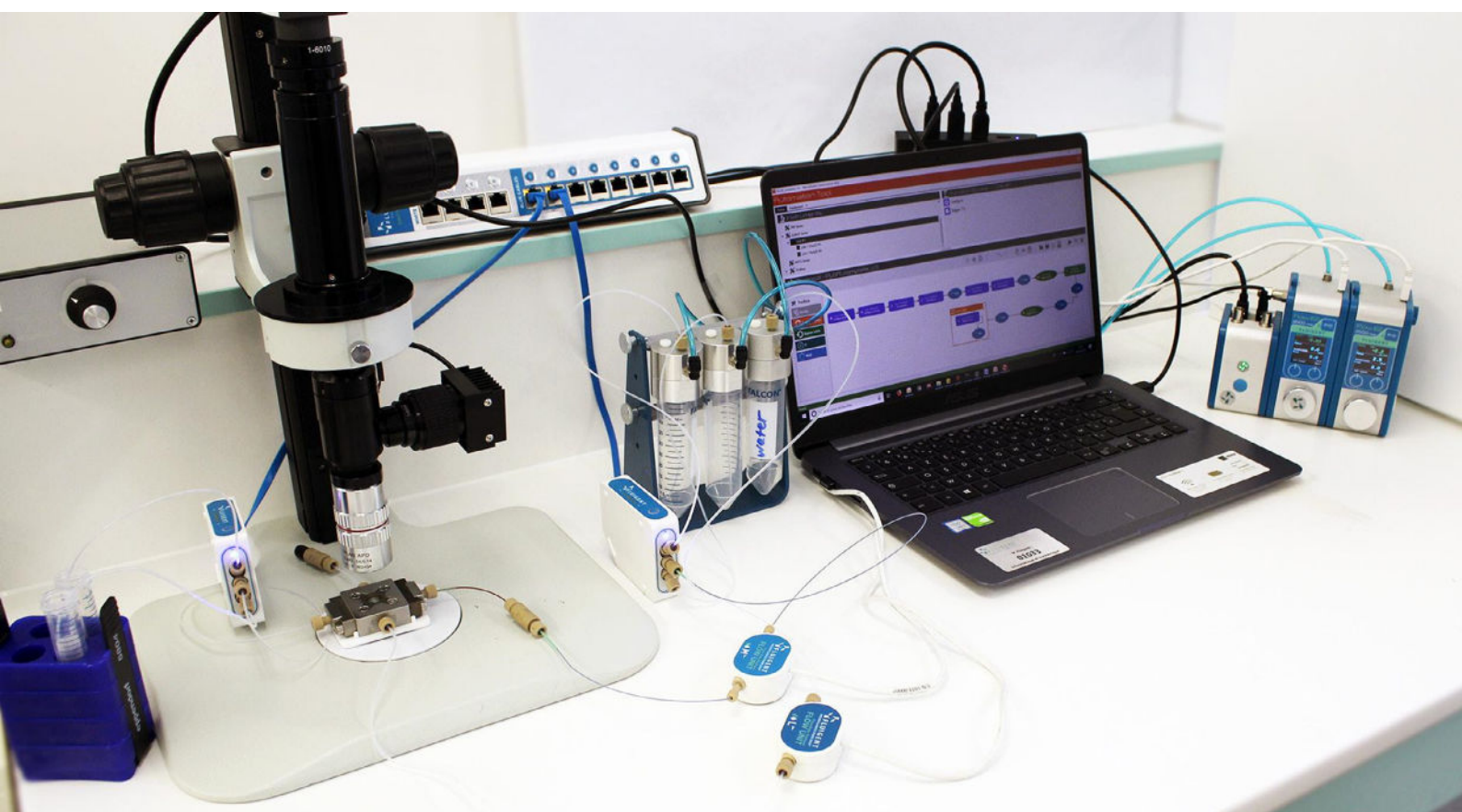


# PLGA NANOPARTICLES PRODUCTION STATION

## PRODUCT DESCRIPTION

P/N: O-MIX-PLGANP-PCK



The Fluigent PLGA nanoparticle production station is a robust and a high-quality system for precisely control the production of monodisperse PLGA nanoparticles with high flexibility in changing particle sizes production. Its performance is coming from the combination of Fluigent's LineUP microfluidic pumps and the RayDrop device, a breakthrough technology for high-quality particles production.

# DESCRIPTION

The **Fluigent PLGA nanoparticle production station** is a **versatile** system for the production of **monodisperse PLGA nanoparticles** with **high flexibility**, allowing for particle sizes over the range of 100-250 nm.

## CONTENT

- 2 \* Flow EZ™ (2000 mbar)
- 1 \* Link
- 2 \* FLOW UNIT (M and L)
- 3 \* P-CAP (3\* 15ml)
- 2 \* 2-SWITCH™
- 1 \* SwitchEZ
- 1 \* RayDrop™
- 1\*Lineup supply kit
- 1\*Low flow rate kit
- 1\*High flow rate kit
- 3\*Pcap 15ml kit
- 2\* 2-switch kit
- 1\* Raydrop PLGA nanoparticles connector and tubing kit
- OxyGEN Software
- 1 \* Digital high-speed microscope (optional)

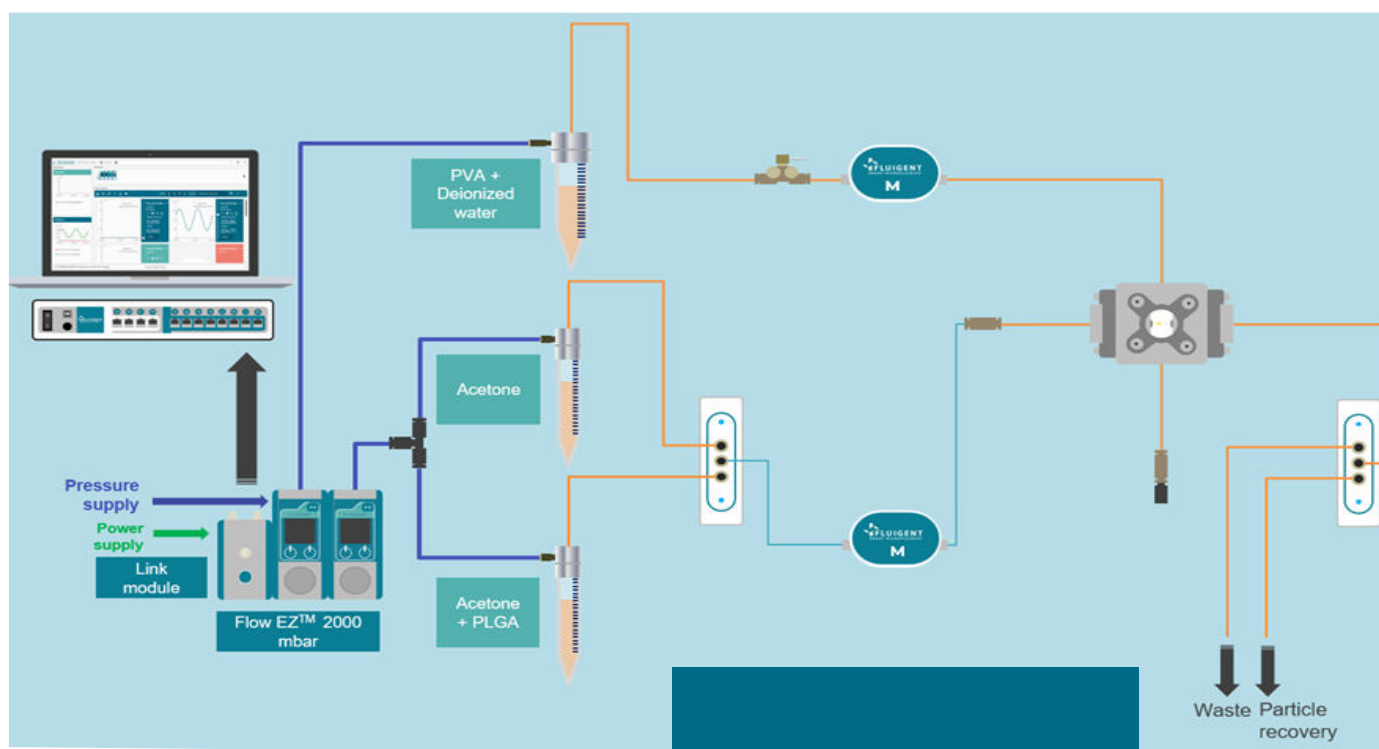
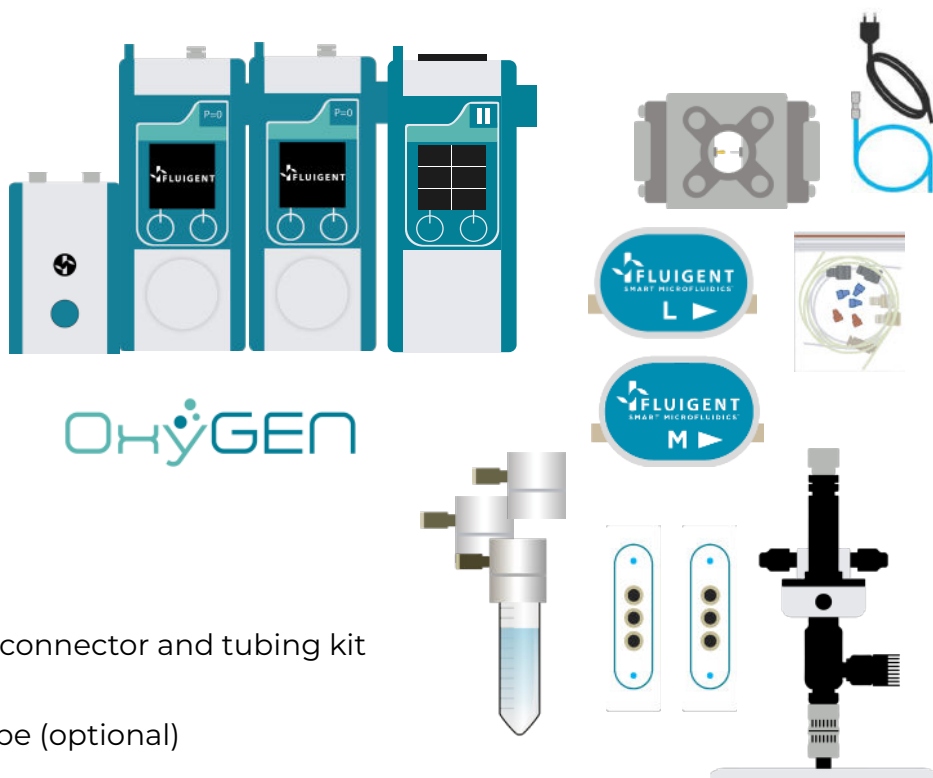


Figure 1. Set-up of PLGA nanoparticle production station.

**SETTING-UP THE STATION**  
Please refer to the [Good Practice Guide](#)

# TECHNICAL SPECIFICATIONS

PLGA NANOPARTICLES PRODUCTION	
Inner phase	Acetone + Poly(lactic-co-glycolic acid) (PLGA) Resomer 756 1%
Outer phase	Deionized water + Polyvinyl alcohol (PLGA) Mw 90000 – 10000 80 % hydrolyzed
Particle size range*	100 to 250 nm
Polydispersity*	From 5% to 15%

FLOW CONTROL		SOFTWARE	
Pumps**	Fluigent Flow EZ™ (2 bar)	Live control	OxyGEN Software
Flow sensors**	Fluigent FLOW UNIT (M)	Automated control	OxyGEN Software
Automated valves**	Fluigent 2-SWITCH™	Imaging	Pixelink Capture Software

IMAGING (OPTIONAL)	
Microscope	Fluigent Digital high-speed microscope

\* Depending on FRR (download the PLGA nanoparticle production application note for more information)

\*\*For detailed specification: download LineUP User Manuel, ESS User Manuel.