



## **Liquid Particle Counter LD-LLPC-A20**

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# Liquid Particle Counter LD-LLPC-A20

## Overview

Liquid Particle Counter LLPC-A20 is a benchtop equipment with the ability to handle viscosity of the sample up to 650 cSt. Features high precision sensors and syringe sampling system to obtain accurate results with good repeatability. There are 16 selectable channels with a measuring range of 0.8 to 600  $\mu\text{m}$ . The results are displayed using four calibration curves which can also be stored and even switched to minimise conversion error. It has wide applications in petroleum industry, chemical industry, aerospace, machinery and many other fields.

## Features:

- Based on Light Blocking Method to achieve rapid detection speed, accuracy and good repeatability
- High precision sensors are used to get a higher resolution
- Syringe sampling system: To achieve constant sampling speed and to control sample volume
- Pressurized sample delivery to degas the sample and increase the accuracy
- Color LCD display, touch screen, graphics menu to make the operations simple
- Several standards to rate the particle pollution are stored and also new standards can also be added
- Granularity and size of 9900 particles can be easily analysed through different channels
- Four calibration curves: latex ball calibration curve, ACFTD calibration curve, ISDMTD calibration curve, GOST calibration curve
- Curves can be switched to minimise conversion error and can be stored
- Data storage function to retrieve the data easily
- Test reports can be printed through built-in printer
- Advanced software and RS232 interface to connect external computer
- Magnetic stirring to distribute the particles evenly Gas filtration and purification system to eliminate contaminants from air pressure pump

## Applications:

It finds application in detection of solid pollutants in lubricating oil, insulating oil, hydraulic oil, aviation kerosene etc. It can trace the insoluble particles in polymer solution and organic liquid. Therefore it has wide applications in petroleum industry, chemical industry, automobile manufacturing, aerospace and many other fields.

## Specifications:

<b>Resolution</b>	Be superior to 10 % 1S011171
<b>Sensitivity</b>	0.8 $\mu\text{m}$ (1S04402) or 3 $\mu\text{m}$ (c)
<b>Light source</b>	Semiconductor laser
<b>Power supply</b>	100 to 245 V, 49 to 62 Hz
<b>Repeatability</b>	RSD < 2 %
<b>Cleaning speed</b>	5 to 80 ml/min

<b>Count accuracy</b>	± 10 %
<b>Sampling speed</b>	5 to 80 ml/min
<b>Measuring range</b>	0.8 µm to 600 µm (Depends on the sensor)
<b>Sampling volume</b>	0.2 to 100 ml, interval 0.1 ml
<b>Work temperature</b>	0°C to 60°C
<b>Measuring channels</b>	16 channels, particle size can be set arbitrarily
<b>Overall dimensions</b>	Mainframe 430 × 320 × 590 mm Air pressure bump 330 × 266 × 255mm
<b>Storage temperature</b>	-30°C to 80°C
<b>Instrument net weight</b>	Mainframe 30 kg Air pressure bump 10 kg
<b>Test sample viscosity</b>	? 650 cSt
<b>Coincidence error limit</b>	12000 to 40000 particles/ml (Depends on the sensor)
<b>Test sample temperature</b>	0°C to 80°C
<b>Sampling volume precision</b>	Be superior to ± 0.5 %
<b>Air pressure chamber maximum vacuum</b>	- 0.08 mPa
<b>Air pressure chamber maximum pressure</b>	1 mPa