

# Liquid Particle Counter LLPC-A20



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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

Model No	LLPC-A20
Light source	Semiconductor laser
Measuring range	0.8μm to 600μm (Depends on the sensor)
Sensitivity	0.8μm (ISO4402) or 3μm (c)
Measuring channels	16 channels, particle size can be set arbitrarily
Sampling volume	0.2 to 100 ml, interval 0.1 ml
Sampling volume precision	Be superior to ± 0.5 %
Sampling speed	5 to 80 ml/min
Cleaning speed	5 to 80 ml/min
Resolution	Be superior to 10 % ISO11171
Coincidence error limit	12000 to 40000 particles/ml (Depends on the sensor)
Repeatability	RSD < 2 %
Count accuracy	±10%
Maximum vacuum of air pressure chamber	- 0.08 mPa
Maximum pressure of air pressure chamber	1 mPa
Test sample viscosity	≤ 650 cSt
Test sample temperature	0°C to 80°C
Work temperature	0°C to 60°C
Storage temperature	-30°C to 80°C
Power supply	100 to 245V, 49 to 62Hz
Overall dimensions	1) Mainframe 430 × 320 × 590 mm
	2) Air pressure bump 330 × 266 × 255mm
Instrument net weight	1) Mainframe 30 kg
	2) Air pressure bump 10 kg