

## KLD-B Series Portable Oil Particle Counter



### Introduction:

KLD-B adopts the principle of laser blockage method (laser shading method) to detect the size and number of solid particles in the oil. Based on the measurement, it does the analysis and displays the oil contamination class in various standards (e.g. NAS1638, ISO4406) so as to help the operator be aware of the potential risks and avoid any evitable wear of parts. It can be widely applied to various kinds of oil, such as hydraulic oil, lubricating oil, gearbox oil, insulating oil (transformer oil), etc.

### Features:

- 1.High accuracy. Adopting the principle of laser blockage method (laser shading method) which is the most efficient method to count the number of particles in liquid. Equipped with high-quality Germany-made sensor, which ensures the precision of counting.
- 2.Two ways of measurement. Both on-line and lab sampling measurement are available.
- 3.Able to display the measurement result in the form of NAS1638, ISO4406, GJB by means of both digits and diagrams.
- 4.Equipped with big touch screen. Easy for operation and efficient for display.
- 5.Built-in PC. No need connecting the instrument to another computer, operator could look up the data by various standards such as location, time, operator name, etc. Data also can be transferred via USB connection.
- 6.Printer internally installed. Able to print out the measurement result within 45 sec.
- 7.Lithium battery installed. Suitable for outdoor use.
- 8.Internal peristaltic pump. Flow controlled
- 9.Almost infinite data storage volume.160G hard disk.
- 10.Suitcase design. Compact and rugged. Easy to take along.

**Technical Specification:**

Weight	10KG
Dimension	415mm * 319mm * 168mm
Fluid Temperature Range	0-60 °c
Operating Ambient Temperature	0-40 °c
Relative Humidity	20-85%, non-condensing
Viscosity Range	10-100 cst (46-2000sus) ±20%
Particle Size	NAS 1638:2,5,15,25µm, ISO:4406: 4,6,14,21 µm
Channels	4
Light Source	Laser Diode
Accuracy	+/- half a ISO/NAS code
Typical test time	45 secs
Computer interface	RS 232 communication port
Contamination Class	NAS1638 00-21 ISO4406 01-29
Sample volume	500 ml
Online Operating Flow Rate	50-300 ml/min
Online Operating Pressure	Low Pressure: 0.3-3Mpa(3-30bar) High Pressure: 3-20MPa(30-200bar)
Calibration	Based on ISO MTD (ISO11171:2000)
Hose adapter	M16*2 standard adapter
Data Storage Volume	160 hard disk
Power Supply	AC 220V±10% Rechargeable battery

**Schematic Diagram:**

