

Portable Liquid Laser Particle Counter



LPC230

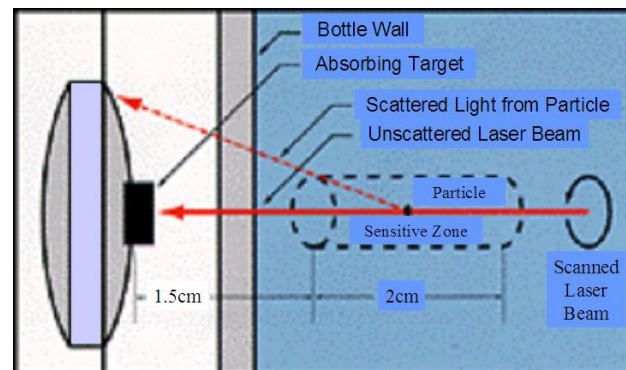
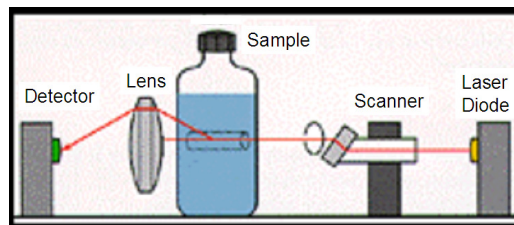
Features

- Measure size distribution from 0.5 μ m to 100 μ m
- Quickly Counts & Sizes (16 seconds min.)
- Use in both In-situ and flowing liquids, oil and water.
- Eliminates sample cell flushing
- Built-in magnetic stirrer
- Large data storage
- Easy do-it-yourself calibration (sealed standards provided)
- Custom easy-to-use software
- AC or Battery operated

Operation Principle

Utilizing the principle of "near-angle light scattering", a revolving laser beam passes through the walls of a glass container or a flow-thru cell. When it is directed through a central "sensitive zone", the LPC230 not only counts the particles in suspension, but also tabulates their size as well. The analog signals generated by the light pulses are routed to a computer and digitized.

Laser Optics



Specifications:

- Detectable Particle Size: from 0.5 μ m - 100 μ m
- Dimension: 14.5 " x 9.5 " x 6"; weight 15 lb.
- Typical bottle size: 15-60 mm inside diameter
- Bottle Material: transparent, scratch-free glass
- Power: 115v 60Hz AC, 12v car jack or internal battery (battery runtime is 5 hours)

Calibration

We provide three sealed calibration standards with each unit. Each standard contains a precise number of NIST traceable polystyrene spheres of known size in suspension and are sealed with inert Argon gas. These standards have a proven stability of more than 10 years and provide efficient calibration within 10 minutes.

- Field Hydraulog
- Water Treatment Plants
- University Laboratories
- Cooling Tower and Waste Water Filter Efficiency
- Particle Agglomeratio Studies
- Silts and Sediment Sizing

SuperCount Software

The custom interfacing electronics and proprietary software provide an easy means of analyzing and saving data generated by the LPC230. SuperCount provides instant sizing information and histogram of size distribution in addition to indicating:

- Absolute Counts
- Mean Size
- Mass Distribution
- Percentage Distribution
- Standard Deviation
- Total Suspended Solids

The dilution factor can be automatically computed to give absolute count for liquids as dense as sludge! SuperCount also is loaded with a special bonus program for hydraulic fluids and Phi classifications.

Options

- Opacity Meter - provides an instantaneous measurement of the sample's opacity to correlate with computer calculations.
- Small Vial Attachment - For use with 5ml vials or ampoules.
- Magnetic Stirrer - built into the LPC230 when ordered, eliminates settling by inducing a constant motion of the sample.
- Flow-Thru Cell - HalTech stocks various sizes of flow-thru cells and can manufacture cells to customer specifications. Cells are also available for testing at high pressure and temperatures.