

Particle Counters

PC-2300 Portable Laser Particle Counter

Measures Particle Quantity and Size from 0.5µm to 100µm diameter. AC or Battery operated, for both Insitu and Flowing Liquids, oil and water.

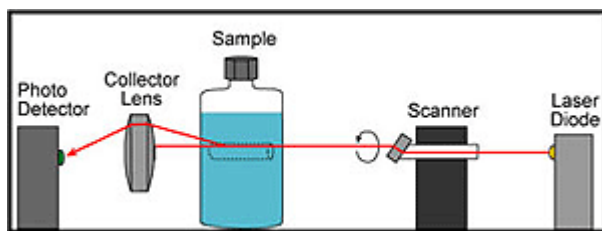


FEATURES

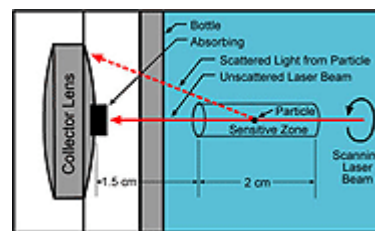
- Complete portability. Use it anywhere!
- Easy Do-it-Yourself Calibration (sealed standards provided)
- Compact & Rugged (15 lbs, floats)
- Quickly Counts & Sizes (16 seconds min.)
- Custom Easy-to-Use Software
- Eliminates Sample Cell Flushing
- Built in Magnetic Stirrer

OPERATION THEORY

Utilizing the principle of "near angle light scatter", a revolving laser beam passes through the walls of a glass container of a flow-thru cell. When it is directed through a central "sensitive zone" the PC-2200 not only counts the particles in suspension, but tabulates their size as well. The analog signals generated by the light pulses are routed to a computer and digitized.



Optical Schematic of the Laser Particle Counter



Detailed Laser optics

CALIBRATION

Spectrex provides 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.

APPLICATIONS

- | | | |
|---------------------------------------|---|---|
| • Water Treatment Plants | • Hydraulic Fluids and Oil QC | • Particle Settling Characteristics |
| • University Laboratories | • Liquid Chromatography Solvent QC | • Corrosive Chemical and Solvent Sizing |
| • Pharmaceutical Manufacturers | • Cooling Tower and Waste Water Filter Efficiency | • Vial and Ampule Inspection |
| • Oil Refineries and On-site drilling | • Particle Agglomeration Studies | • De-ionized Water and Acid Testing |
| • Bottling & Beverage Operations | • Silts and Sediment Sizing | • Cell Counting |
| • Oceanographic Studies | | |

SuperCount SOFTWARE

Developed by Spectrex, the custom interfacing electronics and proprietary software provide an easy means of analyzing and saving data generated by the PC-2200. 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.

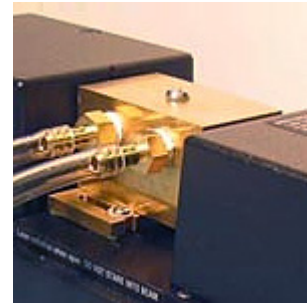
OPTIONS



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 ampules



Flow-Thru Cell - Spectrex 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.

SPECIFICATIONS

- Size: 4.75 " x 14 " x 4.5 " (height with Light Tight Cover is 5 ")
- Typical bottle size: 15-60 mm inside diameter
- Bottle Material: transparent, scratch-free glass
- Weight: 6 lb.
- Power: 115v 60Hz (230v optional)
- Detectable Particle Size: from 0.5µm - 100µm

For Pharmaceutical Research and other applications that require Secure Liquid Particle Data Logging...

Spectrex Presents **DATAKOM** a 21 CFR 11 Compliant Product* that works in conjunction with the **Spectrex Laser Particle Counter**. Reduce your total pharmaceutical production costs, while gaining the benefits of 21 CFR Part 11 Compliance, with the Spectrex Datacom complete solution.

- Data archiving
- Creation of digitally signed electronic reports
- Administrator maintained
- Access rights and authorization
- Instrument calibration audit trail
- Ensure validation
- Digitally signed PDF report generation
- Secure logon, requires strong password
- Unlimited users
- Unauthorized access log
- Instrument calibration logs
- Triple DES password encryption
- Normal and integrated size reports
- Ability to sort size data by user, date, sizes or standard.
- Simple to use.