

# Particle Counter Portable Sampler

*Model PC 2400 PS*



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## 1. General

The PC 2400 PS Particle Counter provides the user unequalled flexibility. The instrument operates as a Grab-Sampler for analysis of individual samples, and in continuous, On-Line mode for real time process monitoring. Windows based software provides instrument configuration, data acquisition, and reporting capabilities to meet the user's specific needs.

## 2. Principle of Operation

Particles in a liquid sample pass through a light beam produced by an infrared laser.

The amount of light blocked by each particle is proportional to its size. Electrical pulses are produced by a detector circuit which correlates to particle sizes. Particle quantity and size are electronically measured, and data is processed for storage, graphing, and reporting.

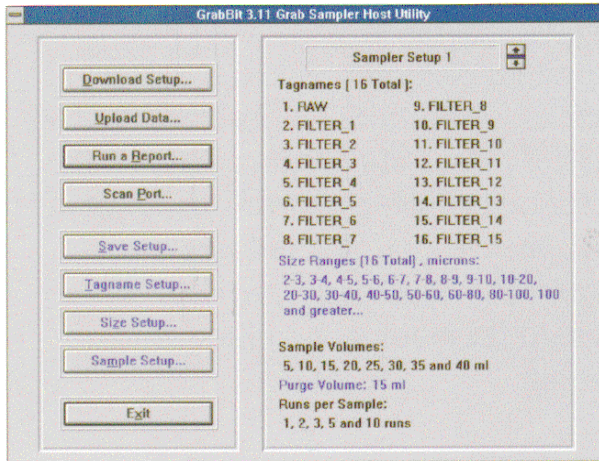
## 3. Benefits/Features

- ✓ Laboratory or On-Line use
- ✓ Fully portable with carrying case
- ✓ Low maintenance sample cell
- ✓ User adjustable size ranges
- ✓ Automatic sample purge
- ✓ Up to 16 size ranges
- ✓ Easy to use Windows based software

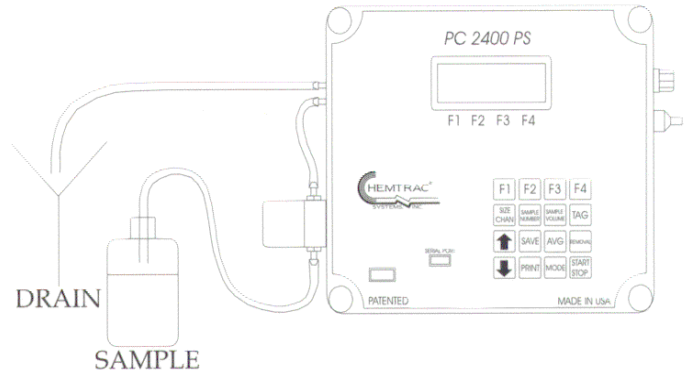
## 4. Specifications

Light Source:	Laser Diode
Sample Flow Rate:	100ml/min (Pumped or Gravity)
Flow Cell Size:	1 mm x 1 mm
Cell Material:	Nituff Coated Aluminum
Viewing Windows:	Sapphire
Dynamic Range:	2-400 Micrometers
Signal to Noise:	3:1 at 2 Micrometers
Coincidence:	10% at 15,000 particles/ml
Power:	110 VAC / 230 VAC
Temperature:	35-120 F
Pressure at Cell:	125 psi max
Size Channels:	16
Tag Names:	16
Sample Volumes:	Eight Selectable (5,10,15,20,25,50,100,150ml)
Runs per Sample:	Five Selectable (1,5,10,15,20 runs)
Computer Requirements:	(Minimum) 486DX, 4MB RAM IBM compatible

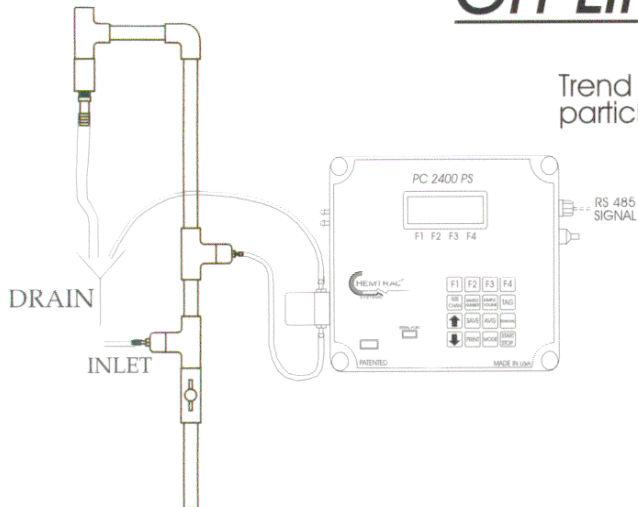
# Batch Mode



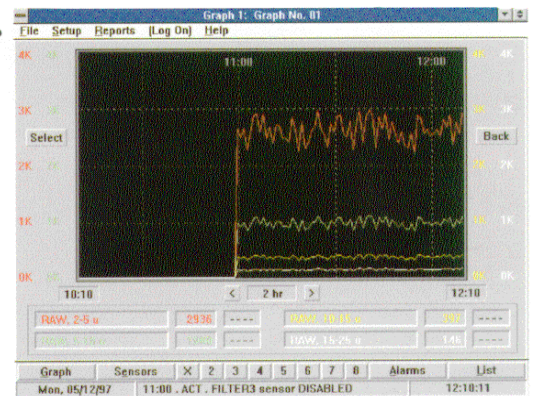
☞ User defined tagnames  
size ranges, sample volumes  
and runs per sample



# On-Line Mode



☞ Trend and display  
particle counts



	RAW	FILTER2	FILTER1	FILTER3
Counts / ml :				
2-5 u	2700	13.7	14.5	14.2
5-10 u	996	1.86	1.97	1.92
10-15 u	366	0.25	0.27	0.26
15-25 u	135	0.03	0.04	0.04
25-50 u	48.0	0.00	0.00	0.00
50-80 u	18.2	0.00	0.00	0.00
80-100 u	6.71	0.00	0.00	0.00
2-100 u	4280	15.9	16.8	16.4
Pelling	----	----	----	----
Blk wash	----	----	----	----
Flow	100	100	100	100
Cell	91.6 %	92.7 %	93.3 %	94.6 %

☞ User configurable  
displays for data

☞ Customizable  
reports and data  
compatible with  
all major  
spreadsheets

	RAW 2-5 u	RAW 5-10 u	RAW 10-15 u	RAW 15-25 u	RAW 25-50 u	RAW 50-80 u	RAW 80-100 u	RAW 2-100 u
12:12	2915	1072	395	145	53.4	19.6	7.23	4508
12:12	2915	1072	395	145	53.4	19.6	7.23	4508
12:11	2681	1050	390	143	52.8	19.4	7.14	4553
12:10	2936	1080	397	146	53.8	19.8	7.28	4641
12:09	2530	931	342	126	46.3	17.0	6.27	3998
12:08	2708	996	366	135	49.6	18.2	6.71	4280
12:07	2319	853	314	115	42.5	15.6	5.75	3655
12:06	2848	1048	386	142	52.2	19.2	7.06	4503
12:05	2644	973	358	132	48.4	17.8	6.55	4179
12:04	2769	1019	375	138	50.7	18.7	6.86	4376
12:03	2461	905	333	123	45.1	16.6	6.10	3889
12:02	2593	954	351	129	47.5	17.5	6.43	4090
12:01	2525	929	342	126	46.3	17.0	6.26	3992
12:00	2479	912	336	123	45.4	16.7	6.14	3918
11:59	2599	956	352	129	47.6	17.5	6.44	4108
11:58	2525	929	342	126	46.3	17.0	6.26	3991
11:57	2793	1027	378	138	51.2	18.8	6.92	4414
11:56	2837	1044	384	141	52.0	19.1	7.03	4485
11:55	2214	814	300	110	40.5	14.9	5.49	3499