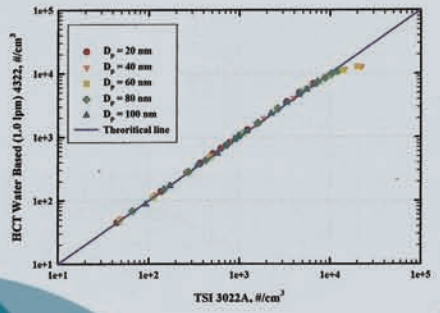
HCT CO.,LTD.

CPC 4322/4323
for Cleanroom Monitoring

Real-time monitoring of airborne particle is critically important in semiconductor processing, hard disk drive, and TFT-LCD manufacturing. The HCT Condensation Particle Counter (CPC) 4322 and 4323 meet the industry requirements for rapid detection and alarm, concentration monitoring and wide area sampling. The water-based CPC(WCPC) is designed for monitoring clean room environments. It detects particles down to 10 nm, and has a high sample flow rate of 2.83 L/min for fast sampling and collection of a specific volume. Particle concentration, total counts, or plots of concentration versus time are displayed on the front panel.

Sampling Flow Rate : 1.0 lpm (HCT 4322)

Particle Concentration : < 10,000 particles/cm^3



Features and Benefits

- Fast response
- High flow rate (Max. 0.1 cfm)
- Achieves a linear response to particle concentration from 1 to 10^4 #/㎤ with R^2 >0.99
- Uses water as condensing fluid
- Compatible with SMPS systems
- Detects particles down to 7 nm
- Clean environment monitoring

Specifications

- Minimum Sensitivity : 7 nm
- Counting Efficiency : 50 % @ 7 nm
- Flow Rate (Inlet and Sensor)
  - 1.0 L/min for 4322
  - 2.83 L/min (0.1 cfm) for 4323
- Working Fluid : Water (D.I. Water recommended)
- Maximum Detectable Concentration :
  - 10,000 particles/㎤ for 4322
  - 1,000 particles/㎤ for 4323
- Accuracy :
  - ±10 % up to 10,000 particles/㎤ for 4322
  - ±10 % up to 1,000 particles/㎤ for 4323
- False Background Counts :
  - 0.001 particles/㎤ for 4322
  - 0.0005 particles/㎤ for 4323
- Response Time :
  - < 5 seconds for 95 % for 4322
  - < 2 seconds for 95 % for 4323
- Communication : Ethernet communication using LAN or USB connections
- Operating System : Windows XP embedded
- Data Logging : CF Memory Card (4GB)
- Dimensions (L x H x W) : 312 x 310 x 300 mm
- Weight : 12 kg
- Power : 100~230 VAC. 50~65 Hz