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Technical Specifications for Optical Particle Sizer :

1. Particle Concentration Limit: Upto 3000 particles/cm³ (3,000,000 particles/liter)
2. Mass concentration: 0.001 to 275000 ug/m³
3. Particle size range : 0.3 to 10um
4. Size Resolution : 5% at 0.5 um per ISO 21501-01/04
5. Size channels : up to 16, user-adjustable size channels
6. Zero count : <1 count per minute
7. Sampling time : ≥ 1 second, user-adjustable
8. Flow rate: 1.0 L/min: $\pm 5\%$ accuracy (meets ISO 21501)
9. Sheath : 1.0 L/min.

Environmental Conditions:

Operational Temperature: 0 to 45°C

Humidity : 0 to 96% RH, non-condensing

Storage temperature: -20 to 60°C

Aerosol Medium: Air only

Data storage: 5MB on-board memory (30,000 samples)

Communications:

Interfaces: USB, Ethernet or USB flash drive

Digital display : 5.7 in color touchscreen w/graphical display

Analog output : 0 to 5V or 4 to 20mA. User selectable out-put and user selectable.

Alarm out : Visual indication, audible buzzer, relay or switch, user selectable set point

Gravimetric Sampling:

37 mm filter inside standard removable 37 mm filter cartridge

Vacuum Source:

Internal pump

Light Source:

Long lasting laser diode

Power:

AC Adaptor 100-240 VAC, 50/60 Hz, 15W

Technical Specifications for Hand-Held condensation particle counter:

1. Particle size range:
Min. Detectable particle (D_{50}) : 10nm
Max. Detectable particle : >1 μ m.
2. Concentration range:
0 to 100,000 particles/cm³
3. Minimum displayable concentration value
1 particle/cm³
4. Concentration accuracy:
 \pm 20%

5. False background counts :

<0.01 particles/cm³

6. Response Time:

<9 sec for 95% response

7. Environmental operating conditions

Ambient temperature: 10 to 35°C

Storage temperature : -40 to 70°C

8. Flow rate:

Detected Aerosol - 100 cm³/min

Inlet : 700cm³/min

9. Aerosol inlet diameter: ¼ in.O.D.

10. Power Requirement:

Battery type: 6AA alkaline or rechargeable

Battery life : 5hours(alkaline batteries at 21°C)

11. Alcohol Requirement :

Type: 99.5% + reagent-grade isopropyl alcohol

Hours per fill : 6 hours at 21°C

12. RS-232 output : 9600 Baud rate

13. Software: supplied with TSI Aerosol Instrument Manager software CPC module