The particle counter is an essential tool in the HVAC/IAQ professional’s toolbox. From filter testing to basic IAQ investigations, the particle counter equips the user with valuable data concerning the concentration and source of particulates in the tested environment.

Airborne particles can settle onto sensitive surfaces or carry allergens and bacteria into the environment, resulting in product and productivity losses if left unchecked. The Fluke 983 is a first response tool that is lightweight and easy to use in any position. The rugged holster contains an integrated strap for one-handed operation, reducing the fatigue found in using less portable units. The significant data logging capacity and long battery life mean more uninterrupted time on the job.

**Fluke 983 Particle Counter**
- Selectable sample time, count data, programmable delay
- Set sample size to cubic feet or liters, set temperature measurements to °C or °F
- Data displayed in totalize or concentration modes
- Logged samples include date, time, particle counts, sample volume, temperature and relative humidity.

**General Features**
- Compact and lightweight (1.0 kg/2.2 lbs)
- Graphic liquid crystal display with backlight
- AC adapter, 12 V dc at 2.5 A, 90 to 250 V ac, 50 to 60 Hz
- Rechargeable battery (NiMH, 4.8 V at 4.5 Ah)
- Simple user interface
- Operating: 10 °C to 40 °C (50 °F to 104 °F), 20 % to 90 % relative humidity, non-condensing
- Meets JIS B9921:1997 and CE standards
- Included:
  - Certificate of Calibration (NIST)
  - Windows-compatible software download utility
  - DB9 to RS-232 adapter and cable
  - Isokinetic probe
  - Zero count filter
  - High purity tubing
  - 1/8 in. hose barb adapter
  - Power supply
  - Operation manual
  - Hard molded plastic case
## Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 size channels</td>
<td>0.3, 0.5, 1.0, 2.0, 5.0, 10.0 µm</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>0.1 cfm (2.83 L/min) controlled by internal pump</td>
</tr>
<tr>
<td>Count Modes</td>
<td>Concentration, totalize, audio</td>
</tr>
<tr>
<td>Counting Efficiency</td>
<td>50 % @ 0.3 µm; 100 % for particles &gt; 0.45 µm (per JIS B9921:1997)</td>
</tr>
<tr>
<td>Zero Count</td>
<td>1 count/5 minute (JIS B9921:1997)</td>
</tr>
<tr>
<td>Coincidence Loss</td>
<td>5 % at 2,000,000 particles per ft³</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>± 7 %, 20 % to 90 % non-condensing</td>
</tr>
<tr>
<td>Temperature</td>
<td>± 3 °C, 10 °C to 40 °C (50 °F to 104 °F)</td>
</tr>
<tr>
<td>Data Storage</td>
<td>5000 sample records (rotating buffer) of date, time, counts, relative humidity, temperature, sample volumes, alarms, label</td>
</tr>
<tr>
<td>Alarms</td>
<td>Counts, low battery, sensor fail</td>
</tr>
<tr>
<td>Delay Time</td>
<td>0 to 24 hours</td>
</tr>
<tr>
<td>Sample Inlet</td>
<td>Isokinetic probe</td>
</tr>
<tr>
<td>Interface</td>
<td>RS-232 and RS-485 via RJ-45</td>
</tr>
<tr>
<td>Dimensions (W x L x D)</td>
<td>11.43 cm x 20.96 cm x 5.72 cm (4.5 in x 8.25 in x 2.25 in)</td>
</tr>
<tr>
<td>Weight</td>
<td>1.0 kg (2.2 lbs)</td>
</tr>
<tr>
<td>Environmental</td>
<td>Operating: 10 °C to 40 °C (50 °F to 104 °F), 20 % to 90 % relative humidity, non-condensing</td>
</tr>
<tr>
<td></td>
<td>Storage: -10 °C to 50 °C (14 °F to 122 °F), up to 90 % relative humidity, non-condensing</td>
</tr>
<tr>
<td>Power</td>
<td>AC adapter, 12 V dc at 2.5 A, 90 to 250 V ac, 50 to 60 Hz</td>
</tr>
<tr>
<td>Rechargeable Battery</td>
<td>NiMH, 4.8 V at 4.8 Ah; replaceable</td>
</tr>
<tr>
<td>Battery Live / Recharge Time</td>
<td>8 hours / 2 hours</td>
</tr>
<tr>
<td>Calibration</td>
<td>PSL particles in air (NIST traceable)</td>
</tr>
</tbody>
</table>

## Ordering Information

**Fluke-983**  
Particle Counter

**Available Accessories**

**Fluke-983TPK 220**  
Thermal Printer Kit, 220 V

**Fluke-983TPK 120**  
Thermal Printer Kit, 120 V

**Fluke 983 Thermal Printer Kit includes:**

- Thermal printer, (2) rolls paper, battery pack, power adapter, serial adapter

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**Fluke. Keeping your world up and running.**

**Fluke Corporation**  
PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.  
PO Box 1186, 5602 BD  
Eindhoven, The Netherlands

For more information call:  
In the U.S.A. (800) 443-583 or  
Fax (425) 446-5116  
In Europe/M-East/Africa (31 40) 2 675 200 or  
Fax (31 40) 2 675 222  
In Canada (800) 36-FLUKE or  
Fax (905) 890-6866  
From other countries +1 (425) 446-5500 or  
Fax +1 (425) 446-5116

Web access: http://www.fluke.com

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