CONSTANT FLOW AIR SAMPLER

MODEL HD-28A™

- HD-28A Specifications
- HD-28A Accessories
- Constant airflow maintained with a Delta P across the filter of up to 17" of mercury (flow rate dependent)
- Front panel mounted air flow indicator
- Vacuum gauges for observed filter loading and pump performance
- Elapsed time meter and constant air flow rate permit calculation of accurate sample volume
- Low noise level
- Calibration may be certified traceable to NIST

**Features:**

- The Model HD-28A is a portable "K-Flow" bench type constant flow air sampler designed for use on perimeter and off-site monitoring stations in environmental monitoring systems and in production and laboratory areas where the collection of precise air samples is required. Its combination vacuum pump and constant air flow regulator permits the collection of an airborne particulate and iodine sample at a constant flow rate until the Delta P across the filter media exceeds the capability of the pump. The higher the flow rate, the lower the Delta P for constant flow control. The controlled flow rate is adjustable from 0.5 to 3.0 cfm through 47mm and 2 inch diameter filters (such as asbestos, fiberglass and membrane types) and charcoal or silver zeolite cartridges used for Iodine 131 collection.

- An internal air filtering system has been installed between the regulator valve and the pump to prevent particulates from reaching the self-adjusting carbon vanes and causing excess wear. A minimum of preventive maintenance assures a long performance life for the pump. A resettable elapsed time meter is mounted on the instrument panel. By setting this timer to zero at the start of each sample period, an accurate sample volume may be readily calculated.
Specifications:

- Air flow rate
  - Adjustable from 0.5 to 3.0 CFM (15 to 85 LPM). Air Flow calibrations made to individual unit characteristics.
- Air flow indication
  - Venturi mounted rotameter
- Air flow regulation:
  - ±5% of set air flow rate up to maximum capability of pump.
- Air mover
  - Self-adjusting carbon vane type. Pump is designed for continuous operation at 26" Hg vacuum.
- Resettable elapsed time meter
  - 9999 Hours and 60 minutes, pushbutton resettable.
- Motor
  - 1/3 HP; Thermal Overload Protection
- Unit Cooling
  - 120 cfm extra high flow at maximum back pressures. All metal continuous duty fan.
- Input connection
  - 3/8" Female Quick Disconnect Fitting
- Power connection
  - 6 foot, three wire grounded cable. U.L. Approved.
- Power requirements
  - 115VAC, 60 Hz, 8 Amps, or 230VAC, 50Hz, 4 Amps
- Overall dimensions
  - 18" Long x 11" Wide x 9" High (45.7cm x 27.9cm x 22.9cm)
- Weight
  - 35 pounds (15 kg)
Components, Accessories and Options:

- Sample Heads Available

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>2500-04</td>
<td>2&quot; diameter filter, open face</td>
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<tr>
<td>2500-42</td>
<td>47mm diameter filter, open face</td>
</tr>
<tr>
<td>2500-92</td>
<td>37mm diameter filter, open face</td>
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<tr>
<td>2500-91</td>
<td>25mm diameter filter, open face</td>
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<tr>
<td>2500-21</td>
<td>2&quot; diameter filter/RADeCO cartridge, open face</td>
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<tr>
<td>2500-46</td>
<td>47mm diameter filter/RADeCO cartridge, open face</td>
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<tr>
<td>2500-45</td>
<td>2&quot; diameter filter/RADeCO cartridge, in-line</td>
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<tr>
<td>2500-44</td>
<td>47mm diameter filter/RADeCO cartridge, in-line</td>
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</tbody>
</table>

- 210B Weather House
- Air Flow Calibrator
- Air Sampling Filter Holders
- Radioiodine Sampling Cartridges
- Filter Papers