Sensitive, rugged and easy to use, the Airtec monitor provides results that are time-and-space-resolved. This capability enables rapid modification of vehicle use, personnel placement and mine or building ventilation. The monitor uses technology developed by the diesel particulate group at the NIOSH Pittsburgh Research Laboratory and has been determined to precisely replicate results from their method 5040 test.

In addition to being compact and lightweight enough to be worn on a miner’s belt, the Airtec monitor can be mounted in a vehicle cab, on a mine wall or on ventilation equipment. The monitor operates on a Lithium-ion battery for more than a full shift or AC power using an adapter. Readings are displayed on an LCD screen with a user-selectable backlight and data can be downloaded using supplied software via USB connection for review of an extended monitoring period. The instrument has an integrated air pump and submicron particle size selector; allowing for immediate use.

**BENEFITS**
- Decreased DPM monitoring costs
- Helps prevent MSHA non-compliance
- Increased miner safety
- High DPM level alarms
- Allow engineering control evaluation
- Enables ventilation on demand (VOD)
- Bolsters confidence in a healthy environment
- Real time results

**KEY FEATURES**
- Lightweight, rugged device
- Wearable by miners on a belt loop
- High sensitivity to DPM
- Contains a flow-selectable air pump
- Equivalent results to NIOSH method 5040
- Large display
- Battery or AC power
- Similar size to a self rescuer
- Rechargeable
- Easy to replace cartridges

**8 hour TWA EC Concentration Comparison via:**
1. NIOSH 5040 150.25 µg/m³
2. Airtech Monitor 154.36 µg/m³
OPERATIONAL ADVANTAGES

Real time results
No more waiting days or weeks for results
Can be worn on a belt or vehicle/wall mounted
Light and highly portable
No filters to send to an outside lab
All measurements done on the instrument
Easy to use
-Self-explanatory interface
Verifies effectiveness of ventilation
Allows corrective action to be taken
Generates dozens to thousands of EC concentration values for less than a single NIOSH 5040 test
Can connect to a data network via optional 4-20 mA output
Specifically detects DPM (via EC measurements); no sensitivity to common mine interference

SPECIFICATIONS

Specifications subject to change without notice

<table>
<thead>
<tr>
<th>System Weight</th>
<th>1.5 lbs (681g)</th>
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<tbody>
<tr>
<td>Power Requirements</td>
<td>7.4 VDC (built-in Li-ion battery) 100 - 240 VAC (wall charger)</td>
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<tr>
<td>Sensitivity</td>
<td>&lt; 15 μg/m³ elemental carbon (EC)</td>
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<tr>
<td>Dynamic Range</td>
<td>9-600 μg/m³ (8hr TWA EC)</td>
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<tr>
<td>Output</td>
<td>LCD display with user-controlled backlight User selectable 1, 5, 15 min. averaging EC and TC data logged 8 hr TWA DPM levels Mini-USB connection Optional 4-20 mA output</td>
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<tr>
<td>Alarms</td>
<td>Low battery, filter change necessary Pump flow LCD alerts</td>
</tr>
<tr>
<td>Battery Life</td>
<td>&gt;12 hrs</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Approx 12.1cm(H) x 13.3cm(W) x 6.4cm(D) 4.75&quot;(H) x 5.25&quot;(W) x 2.5&quot;(D)</td>
</tr>
<tr>
<td>Data Archive</td>
<td>2.75 to 66.6 days (1 min. to 1 hr sample intervals)</td>
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TRAINING & SUPPORT

In addition to a comprehensive manual, the monitor comes with a simple quick start guide describing:
- Basic operation
- Routine maintenance
- Troubleshooting
- Principle of operation

Customer support is available by phone or email and annual recalibration is available.

FLIR is a leader in the development and integration of advanced sensor technologies for homeland security, force protection and commercial applications. Our sensors and air samplers are used by government and commercial customers to detect explosives, radiation, bioagents, hazardous chemicals and gasses.