

# SidePak™ Personal Aerosol Monitor

Model AM520/AM520i



Features and Benefits (A4)

Features of AM520	Benefits
<b>High Concentration Impactors</b>	<ul style="list-style-type: none"> <li>➤ Design with sintered metal disk for PM1, PM2.5, PM5, and PM10 size fractions</li> <li>➤ Use of vacuum oil on disk allows for greater particle build-up, particles always being presented with a wet, sticky surface to adhere to</li> <li>➤ Convenient, integrated design eliminates need for clumsy label-mounted impactors</li> <li>➤ Accurate size fraction measurement for mass concentrations of up to 10 mg/m<sup>3</sup> for 12-hours continuously</li> <li>➤ Expands range of activities that can be confidently measured with accurate size fraction measurements</li> </ul>
<b>Audible and Visual Alarms</b>	<ul style="list-style-type: none"> <li>➤ Option to create a setpoint for a response concentration as well as total mass concentration</li> <li>➤ Immediately react to unsafe work conditions and take appropriate actions                             <ul style="list-style-type: none"> <li>- To activate engineering controls, or put on a respirator</li> </ul> </li> <li>➤ Immediate feedback to workers regarding elevated aerosol concentrations</li> <li>➤ Audible alarm sounds at 95 dBA at 1' distance</li> <li>➤ OLED display turns "ORANGE" within 10% of alarm setpoint to alert worker, then turns "RED" when alarm is reached</li> <li>➤ Four, "RED" LEDs flash on each side of the display on the membrane keypad when in alarm condition</li> </ul>
<b>STEL Alarm</b>	<ul style="list-style-type: none"> <li>➤ Used to track a worker's STEL exposure</li> <li>➤ Independently log a separate STEL test to track high exposures</li> <li>➤ Understand when workers have been potentially overexposed</li> <li>➤ User adjustable from 5 to 30-minutes</li> </ul>
<b>Intrinsic Safety Rating</b> (AM520i only) Ex ia IIC T4 Ga Exia Class I, Div 1, Group A,B, C, D Class II, Div 1, Groups E, F, G Class III, Div 1	<ul style="list-style-type: none"> <li>➤ Approved for use in hazardous/flammable atmospheres</li> <li>➤ Global IECEx/CSA-UL/ATEX Intrinsic Safety Ratings</li> <li>➤ Expands personal real-time aerosol monitoring capability to workers in: Chemical Plants, Petrochemical, Refineries, Mining, Hazardous Waste Sites, Confined Space, etc.</li> </ul>
<b>0.8 µm Diesel Particulate Matter Cyclone</b>	<ul style="list-style-type: none"> <li>➤ Measure Diesel Particulate Matter size fraction in real-time with photometer</li> </ul>

Features of AM520	Benefits
<b>PM<sub>5</sub> “China Respirable” Impactor</b>	<ul style="list-style-type: none"> <li>➤ Industry’s first PM<sub>5</sub> cyclone for real-time size selective aerosol mass sampling to meet China PM<sub>5</sub> respirable dust standard</li> </ul>
<b>“Full-Color” OLED Display (160 x 128)</b>	<ul style="list-style-type: none"> <li>➤ Color display, easy to read in bright light</li> <li>➤ Displays real-time aerosol concentration, 8-hour TWA, test statistics, status messages and menu options</li> <li>➤ Displays pre-alarm and alarm indications on screen in brilliant orange and red, respectively</li> <li>➤ Now includes a dual display of total mass concentration and a secondary, response concentration to estimate levels of a secondary aerosol (i.e., % respirable silica content). Option to disable response concentration is available in settings.</li> </ul>
<b>Li-Ion High Capacity Rechargeable Battery Pack with Built-in Smart Battery Management System™ technology</b> (Microchip built into battery pack monitors battery condition by precisely measuring total battery energy rather than estimating condition based on voltage)	<ul style="list-style-type: none"> <li>➤ Long run time—20+ hours</li> <li>➤ Longer battery life (high no. of charge/discharge cycles)---battery life in minutes of run time are displayed</li> <li>➤ Real-time battery condition, not just an estimate</li> <li>➤ Fast charging—4-hours typical</li> </ul>
<b>Works with TrakPro™ V5 Data Analysis Software</b>	<ul style="list-style-type: none"> <li>➤ Now includes a calibration factor calculator for fast and simple creation of calibration factors.</li> <li>➤ Comprehensive report generation capability</li> <li>➤ Quickly create and print graphs for reports</li> <li>➤ Preprogram and store tests to be run later</li> <li>➤ Combine multiple instrument reports</li> </ul>

Standard Features you Expect from TSI®	Benefits
<b>Compact and lightweight</b>	<ul style="list-style-type: none"> <li>➤ Minimal interference with worker activity</li> <li>➤ Smallest, lightest battery operated personal photometer in the market</li> </ul>
<b>Rugged</b>	<ul style="list-style-type: none"> <li>➤ Survives rough on-the-job treatment by workers</li> </ul>
<b>Easy-to-use, intuitive user interface with only 4 keys</b>	<ul style="list-style-type: none"> <li>➤ Fast learning curve</li> <li>➤ Manual seldom needed</li> </ul>
<b>Built-in pump with user-adjusted flow rate</b>	<ul style="list-style-type: none"> <li>➤ Allows for use with a variety of size-selective aerosol inlets</li> </ul>
<b>Data logging</b>	<ul style="list-style-type: none"> <li>➤ “Exposure Trail” analysis – time history data review allows you to see when peak exposures occurred and where they occurred to quickly locate the source of exposure and correct it, reducing worker exposure</li> <li>➤ Recording of aerosol concentrations for later analysis and record-keeping</li> </ul>
<b>Industry standard Dorr-Oliver Respirable Cyclone included with kits</b>	<ul style="list-style-type: none"> <li>➤ A complete package for breathing zone measurement of respirable aerosols</li> </ul>
<b>Real-time 8-hour TWA display</b>	<ul style="list-style-type: none"> <li>➤ The "final" number in real time---no waiting</li> </ul>

Standard Features you Expect from TSI®	Benefits
<b>Removable battery pack</b>	<ul style="list-style-type: none"> <li>➤ Battery can be charged while attached to the instrument or be removed and charged separately with power supply</li> <li>➤ Charge one battery while instrument is in use (additional battery sold separately)</li> <li>➤ No special charging base needed to charge battery</li> </ul>
<b>AM520 Kits include everything you need to get started with real-time personal exposure monitoring including:</b> battery, software, impactors, cyclones, charger, USB cable, sample tubing, tools and a carry case	<ul style="list-style-type: none"> <li>➤ No guesswork trying to figure out what accessories to order.</li> <li>➤ Everything you need is in one kit</li> </ul>
<b>Replaceable belt clip</b>	<ul style="list-style-type: none"> <li>➤ Instrument stays securely attached to workers belt or harness</li> </ul>
<b>Survey mode for real-time readings</b>	<ul style="list-style-type: none"> <li>➤ Instant determination of real-time aerosol concentration</li> </ul>
<b>Manual mode data logging via front panel keypad</b>	<ul style="list-style-type: none"> <li>➤ Quickly and easily setup and start data logging without pre-programming with a computer first</li> </ul>
<b>Pre-programmed data logging</b>	<ul style="list-style-type: none"> <li>➤ Save time by setting test parameters ahead of time using TrakPro™ V5 software and your personal computer</li> <li>➤ Launch program from keypad</li> </ul>
<b>Test statistics including min., max., avg., elapsed time, 8-hour TWA</b>	<ul style="list-style-type: none"> <li>➤ Provides on the spot test summary information on the LCD display and via TrakPro V5 software</li> </ul>
<b>Store multiple tests on the AM520</b>	<ul style="list-style-type: none"> <li>➤ No need to download after each test</li> </ul>
<b>Store user-defined calibration factors for up to 10 different aerosols based on comparisons to gravimetric samples</b>	<ul style="list-style-type: none"> <li>➤ No need to memorize values, just select from the list after defining custom calibration factors</li> </ul>
<b>Apply user-defined labels to calibration factors. For example, "WOOD DUST" or "SILICA DUST"</b>	<ul style="list-style-type: none"> <li>➤ Select calibration factors from your list based on the name you defined</li> <li>➤ No memorizing</li> <li>➤ No errors</li> </ul>
<b>Socket for tripod mounting</b>	<ul style="list-style-type: none"> <li>➤ Convenient mounting for area sampling in locations where there is no suitable place to set the instrument down</li> </ul>



**Knowledge Beyond Measure.**

**TSI Incorporated** – Visit our website [www.tsi.com](http://www.tsi.com) for more information.

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