



# SIDEPAK™ AM520/AM520i PERSONAL AEROSOL MONITOR

FEATURES AND BENEFITS (US)

New Features of AM520	Benefits
<b>High Concentration Impactors</b>	<ul style="list-style-type: none"> <li>+ New design with sintered metal disk for PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>5</sub>, and PM<sub>10</sub> 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 lapel-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>+ Immediately react to unsafe work conditions and take appropriate actions</li> <li>- To activate engineering controls, or put on a respirator</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>



New Features of AM520	Benefits
<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>New 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>
<b>New 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>New “Full-Color” OLED Display</b> (160 x 128)	<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> </ul>
<b>New 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 New TrakPro™ V5 Data Analysis Software</b>	<ul style="list-style-type: none"> <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>Standard Features you Expect from TSI</b>	<b>Benefits</b>
<b>Industry standard Dorr-Oliver Respirable Cyclone included with kits</b>	+ A complete package for breathing zone measurement of respirable aerosols
<b>Real-time 8-hour TWA display</b>	+ The "final" number in real time---no waiting
<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>	+ Instrument stays securely attached to workers belt or harness
<b>Survey mode for real-time readings</b>	+ Instant determination of real-time aerosol concentration
<b>Manual mode data logging via front panel keypad</b>	+ Quickly and easily setup and start data logging without pre-programming with a computer first
<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>	+ Provides on the spot test summary information on the LCD display and via TrakPro V5 software
<b>Store multiple tests on the AM520</b>	+ No need to download after each test
<b>Store user-defined calibration factors for up to 10 different aerosols based on comparisons to gravimetric samples</b>	+ No need to memorize values, just select from the list after defining custom calibration factors
<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>	+ Convenient mounting for area sampling in locations where there is no suitable place to set the instrument down



UNDERSTANDING, ACCELERATED

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

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