SidePak™ Personal Aerosol Monitor

Model AM520/AM520i

Features and Benefits (US)

Features of AM520	Benefits
High Concentration Impactors	➤ Designed with sintered metal disk for PM_1, $PM_{2.5}$, PM_5, and PM_{10} size fractions
	➤ Use of vacuum oil on disk allows for greater particle build-up, particles always being presented with a wet, sticky surface to adhere to
	➤ Convenient, integrated design eliminates need for clumsy lapel-mounted impactors
	➤ Accurate size fraction measurement for mass concentrations of up to 10 mg/m³ for 12-hours continuously
	➤ Expands range of activities that can be confidently measured with accurate size fraction measurements
Audible and Visual Alarms	➤ Option to create a setpoint for a response concentration as well as total mass concentration
	➤ Immediately react to unsafe work conditions and take appropriate actions
	– To activate engineering controls, or put on a respirator
	➤ Immediate feedback to workers regarding elevated aerosol concentrations
	➤ Audible alarm sounds at 95 dBA at 1' distance
	➤ OLED display turns "ORANGE" within 10% of alarm setpoint to alert worker, then turns "RED" when alarm is reached
	➤ Four, "RED" LEDs flash on each side of the display on the membrane keypad when in alarm condition
STEL Alarm	➤ Used to track a worker's STEL exposure
	➤ Independently log a separate STEL test to track high exposures
	➤ Understand when workers have been potentially overexposed
	➤ User adjustable from 5 to 30-minutes

Features of AM520	Benefits
Intrinsic Safety Rating (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	➤ Approved for use in hazardous/flammable atmospheres ➤ Global IECEx/CSA-UL/ATEX Intrinsic Safety Ratings ➤ Expands personal real-time aerosol monitoring capability to workers in: Chemical Plans, Petrochemical, Refineries, Mining, Hazardous Waste Sites, Confined Space, etc.
0.8 µm Diesel Particulate Matter Cyclone	➤ Measure Diesel Particulate Matter size fraction in real-time with photometer
PM$_5$ "China Respirable" Impactor	➤ Industry's first PM$_5$ cyclone for real-time size selective aerosol mass sampling to meet China PM$_5$ respirable dust standard
"Full-Color" OLED Display (160 x 128)	➤ Color display, easy to read in bright light ➤ Displays real-time aerosol concentration, 8-hour TWA, test statistics, status messages and menu options ➤ Displays pre-alarm and alarm indications on screen in brilliant orange and red, respectively ➤ 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-Ion High Capacity Rechargeable Battery Pack with Built-in Smart Battery Management System™ technology (Microchip built into battery pack monitors battery condition by precisely measuring total battery energy rather than estimating condition based on voltage)	➤ Long run time—20+ hours ➤ Longer battery life (high no. of charge/discharge cycles)---battery life in minutes of run time are displayed ➤ Real-time battery condition, not just an estimate ➤ Fast charging—4-hours typical
Works with TrakPro™ V5 Data Analysis Software	➤ Now includes a calibration factor calculator for fast and simple creation of calibration factors. ➤ Comprehensive report generation capability ➤ Quickly create and print graphs for reports ➤ Preprogram and store tests to be run later ➤ Combine multiple instrument reports

Standard Features you Expect from TSI®	Benefits
Compact and lightweight	➢ Minimal interference with worker activity ➢ Smallest, lightest battery operated personal photometer in the market
Rugged	➢ Survives rough on-the-job treatment by workers
Easy-to-use, intuitive user interface with only 4 keys	➢ Fast learning curve ➢ Manual seldom needed
Built-in pump with user-adjusted flow rate	➢ Allows for use with a variety of size-selective aerosol inlets
Data logging	➢ "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 ➢ Recording of aerosol concentrations for later analysis and record-keeping
Industry standard Dorr-Oliver Respirable Cyclone included with kits	➢ A complete package for breathing zone measurement of respirable aerosols
Real-time 8-hour TWA display	➢ The "final" number in real time---no waiting
Removable battery pack	➢ Battery can be charged while attached to the instrument or be removed and charged separately with power supply ➢ Charge one battery while instrument is in use (additional battery sold separately) ➢ No special charging base needed to charge battery
AM520 Kits include everything you need to get started with real-time personal exposure monitoring including: battery, software, impactors, cyclones, charger, USB cable, sample tubing, tools and a carry case	➢ No guesswork trying to figure out what accessories to order. ➢ Everything you need is in one kit
Replaceable belt clip	➢ Instrument stays securely attached to workers belt or harness
Survey mode for real-time readings	➢ Instant determination of real-time aerosol concentration
Manual mode data logging via front panel keypad	➢ Quickly and easily setup and start data logging without pre-programming with a computer first
Pre-programmed data logging	➢ Save time by setting test parameters ahead of time using TrakPro™ V5 software and your personal computer ➢ Launch program from keypad
Test statistics including min., max., avg., elapsed time, 8-hour TWA	➢ Provides on the spot test summary information on the LCD display and via TrakPro™ V5 software

Standard Features you Expect from TSI®	Benefits
Store multiple tests on the AM520	➢ No need to download after each test
Store user-defined calibration factors for up to 10 different aerosols based on comparisons to gravimetric samples	➢ No need to memorize values, just select from the list after defining custom calibration factors
Apply user-defined labels to calibration factors. For example, "WOOD DUST" or "SILICA DUST"	➢ Select calibration factors from your list based on the name you defined ➢ No memorizing ➢ No errors
Socket for tripod mounting	➢ Convenient mounting for area sampling in locations where there is no suitable place to set the instrument down

TSI Knowledge Beyond Measure.