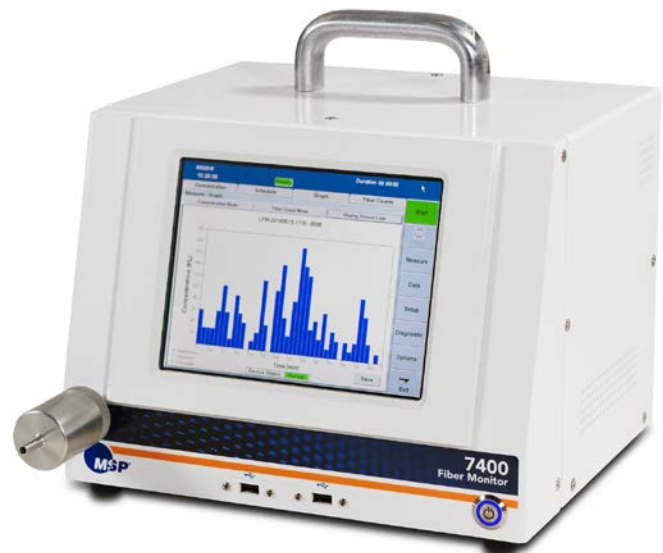




PRODUCT INFORMATION

Model 7400AD — Real-Time Fiber Monitor

- *Detects the presence of potentially hazardous asbestos fibers and other fibers*
- *Low false count from background ambient dust*
- *Laboratory calibrated for asbestos fibers according to NIOSH method 7400 (phase-contrast microscopy or PCM)*
- *Visible and audible alarm when fiber concentration reaches user-defined levels*
- *Field-portable and field-operable with Lithium-ion rechargeable battery pack*



DESCRIPTION

The Model 7400AD is a technologically advanced real-time fiber monitor that automatically detects and counts airborne fibers such as asbestos, mineral wool, advanced composites, ceramic and glass. Each 7400AD is factory-calibrated with traceability to NIOSH Method 7400 for asbestos fibers. An inlet impactor removes large particles to reduce the effect of the background particles in dusty environments.

The 7400AD largely ignores non-fibrous background particles using the proven principle of electric-field-induced fiber alignment and oscillation. The 7400AD is the ideal means to check and verify worker safety during asbestos remediation and removal operations. With its fully charged battery pack, the 7400AD will operate unattended for eight hours and record the observed fiber data at regular intervals. If the fiber concentration exceeds a user-defined, pre-set level, an audible alarm sounds.

The on-board, specialized software allows users to set a range of performance features to customize the operation.

FEATURES

- Measures and reports fiber concentrations in real time.
- Saves measured data over user-selectable sampling interval.
- USB port allows easy upload of data.
- Alarm mode warns when fiber concentrations reach user-selected concentration levels.
- Calculates time-weighted-average exposure limits.
- Color touch-screen LCD provides easy operation and data display.
- Fiber sampling intervals are user adjustable: 1 minute to 24 hours or up to 168 hours of continuous monitoring.
- Easily portable for field use.
- Advanced Li-ion battery pack that can be easily swapped.

APPLICATIONS

- Use before, during and after asbestos abatement to monitor success and ensure safety.
- Measure fiber concentrations in manufacturing operations that use fiber raw materials.
- Monitor airborne fibers that result from uncontrolled releases, such as fires, earthquakes or explosions.



SPECIFICATIONS

Subject to change without notice

Minimum Detectable Fiber Diameter	0.5 μm (estimated)
Minimum Detectable Fiber Length	2 μm (estimated)
Maximum Fiber Concentration	10 fibers/cm ³
Clean Air (HEPA filtered) False Count Rate	≤ 1 count per 24 hours
Typical Ambient Air False Count Concentration (at low PM levels)	≤ 0.001 fibers/cm ³
Sampling Air Flow Rate	2.00 \pm 0.04 L/min
Fiber Sampling Time (user selected)	1 minute to 168 hr
Data Logging Interval (user selected)	1 to 60 minutes
Fiber Concentration Display	<ul style="list-style-type: none"> • Most recent fiber concentration (1-min TWA) and average fiber concentration (from start) • Total fiber counts (from start) • Peak Fiber Concentration for selected sampling interval with time of peak • Graphical display of fiber concentration or fiber counts as a function of time
Alarm Levels (user selected)	8-hr TWA PEL and 30-min STEL
Alarm Sound Intensity	90 dB at 1 meter from instrument
External Power Input	100-240 VAC, 100VA, 50-60 Hz
Instrument Power Input	12-24 VDC; 30W
Battery Specifications	223 W-h Li-Ion rechargeable battery for continuous 8-hr operation
Instrument Dimensions (with battery pack)	311 mm W x 292 mm H x 387 mm D
Instrument Weight (without/with battery pack)	7.8 kg/9.2 kg
International Protection Rating	IP20 (not for outdoor use)
Temperature Operating Range ($^{\circ}\text{C}$)	0 to 40 $^{\circ}\text{C}$
Display Screen	8" LCD, Color, Resistive Touchscreen
Computer	Single Board PC running Windows Embedded
Data Storage Capacity	8 GB CompactFlash Card

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