AIR TECHNIQUES INTERNATIONAL

2H

Portable Digital Photometer

Portability The 2H is the latest digital photometer available in a portable self-contained unit. The 2H has been designed with the user in mind for simplicity of operation and virtually maintenance-free use. Its basic purpose is to detect and measure mass concentration of aerosol. Three-stage airflow sensor and optics indicator lights improve data reliability.

Microprocessor Technology The microprocessor-controlled 2H enables the operator to quickly set operating functions and parameters. It is easily programmed and operates with just 7 push buttons. The digital display has a set-up menu and diagnostic codes for operator convenience. The range of concentration measurable is from 0.000005 to >200 micrograms per liter (dependent upon the upstream challenge concentration in use). The 2H has two pre-set reference values (DOP & PAO) for aerosol agents as well as a USER setting, which allows storage of a sampled concentration to be retained as a reference value.

2H

benefits

Proven design, simplicity, and ease of operation.

Audible alarm feature with adjustable set point.

Internal reference values for DOP and PAO and setting for a user specified value.

Expanded menu features; including purging capability

100 to 250 volts AC, 50/60 Hz fused power entry module with spare fuses.

Optional, 12ft (4.2 meters) scanning probe complete with digital display, visual alarm and improved ergonomic handle.

Flexible probe, with external filter screen holder, is adjustable to all angles. Interchangeable nozzles are included.

Optional, sturdy, heavy duty, lockable, reinforced case.

2H Portable Photometer Specifications

SIZE: 10.1" x 14.3" x 5.8"
25.7 cm x 36.3cm x 14.7 cm

WEIGHT: 15.5 lbs. plus 2.5 lbs. for scanning probe and accessories = 18.0 lbs
7.0 kg plus 1.1 kg for scanning probe and accessories = 8.2 kg.

ENCLOSURE: Instrument enclosure is rugged, die cast aluminum and can be easily disassembled as required for recalibration and service of internal components.
The enclosure has a swiveling handle that also acts as a support, permitting tilting of the control panel display for easy viewing, as well as increasing the ease of transport.

POWER: 100 to 250 volts AC, 50/60 Hz fused power entry module with spare fuses. Automatically adjusts to virtually all standard voltages used worldwide. Please specify power supply cable when ordering unit.

AUTO-RANGING: Automatic from 0.0001% to 100.0%. Provides 6 decades of display and eliminates the manual range selection switch.

AUTO ZERO: Automatically establishes zero by pressing the 0% button when sampling the airflow through the internal ULPA reference filter in the clear mode. Automatically establishes downstream reading as zero by pressing the 0% button when sampling the downstream airflow.

ALARM: Audible alarm in unit sounds when adjustable set point is exceeded. Visible alarm flashes on control panel and scanning probe. Audible portion of alarm can be disabled.

BARGRAPH: Solid-state bar graph with high visibility green LED on control panel and scanning probe.

AMPLIFIER: Solid-state linear amplifier.

PHOTOMETER ACCURACY: 1% of full scale for the decade in use in ratio metric mode.

DIGITAL DISPLAY: % Leakage from 0.0001% to 100.0%

DYNAMIC RANGE: 0.000005 to >200 micrograms per liter. Improved firmware prevents system errors by blanking the display when sampling above 125 micrograms per liter; display is restored when concentration is lowered. "HIGH" mode enables sampling of concentrations exceeding 200 micrograms per liter.

LIGHT SOURCE: Long lasting, stable, solid-state scattering chamber light source. Photometer operates at low power, generating low heat, and low stray light values. Life expectancy is 50,000 to 100,000 hours.

REPEATABILITY: 0.05% full scale

SCATTERING CHAMBER: Field-tested design for efficient and reliable performance. A three-stage "OPTICS" indicator ensures accurate internal reference response; green indicates internal reference within 5% of original value, orange indicates internal reference shifted to 5-10% of original value, and red indicates that the internal reference has shifted by more than 10%.

VACUUM PUMP: True 1 cubic foot per minute (cfm) sample rate (28.3 liters per minute) using a twin head, carbon vane pump for quiet operation and dependability. A HEPA filter is externally integrated at the outlet of the vacuum pump entrapping any particles from the pump exhaust. A "FLOW" indicator ensures operation within required parameters.

OUTPUT: A DB9 connector is provided standard on all units for RS232 output.

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