**TDA-2GA**

**Analog Portable Photometer**

**Portability** The TDA-2GA is the smallest, lightest analog photometer available in a portable self-contained unit. The TDA-2GA 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 in air.

**Technology** A stream of clean air from a HEPA filter is passed through the forward light scattering chamber as the instrument is balanced electrically with respect to any incidental stray light or dark current. A base line of response may be set as a basis of comparison, using the internal reference circuit, which is set for 100 micrograms of polydisperse particles. Once the base line has been set, any subsequent reading will be in relation to that base line. The range of concentration measurable is from 100 to 0.0001 on 5 linear scales on the standard instrument. The TDA-2GA has two pre-set reference values (DOP & PAO) for aerosol agents. The operator can quickly select DOP or PAO as the challenge aerosol.
**TDA-2GA Portable Photometer Specifications**

**SIZE:** 9.5” x 13.5” x 5.0”
24.0 cm x 34.3 cm x 12.7 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 two convenient retractable carrying handles on the sides. Fold-up legs underneath can tilt the control panel display upward for easy viewing.

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

**ALARM:** Audible Alarm in unit sounds when adjustable set point is exceeded. LED on probe lights up when set point is exceeded.

**AMPLIFIER:** Solid-state linear amplifier.

**ACCURACY:** ± 2 % of full scale for the decade in use.

**LIGHT SOURCE:** Improved, longer lasting and more stable solid-state scattering chamber light source. Photometer operates at lower power generating less heat and lower stray light values. Life expectancy is 50,000 to 100,000 hours.

**SCATTERING CHAMBER:** Redesigned smaller, lighter and more efficient for improved performance. Easier to clean and requires less maintenance.

**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. An exhaust filter can easily be attached to the outlet of the vacuum pump to entrap any particles from the pump exhaust.

**OUTPUT:** A DB9 connector is provided standard on all units for a 0-1 VDC output.

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**Proven design, simplicity, and ease of operation.**

**Full control over gain and stray light levels.**

**Full analog unit with analog panel meter.**

**Easily upgradeable to TDA-2G digital photometer.**

**Audible alarm feature with adjustable set point.**

**Two internal reference values for DOP and PAO.**

**Rugged, die cast aluminum enclosure.**

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

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

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