

Digital Aerosol Photometer

Product specifications: Digital Aerosol Photometer

SIZE:	10.1" W × 13.0" D × 6.0" H (25.7 cm × 33.0 cm × 15.2 cm)
WEIGHT:	Base unit - 19.0lbs (8.6Kg), Ensemble - 48lbs (21.8Kg)
POWER:	
Voltage:	100 to 250 Volts AC, 50/60Hz automatic adjustment
Consumption:	0.5 amps @ 120V, 0.25 amps @ 240V
AUTO ZERO:	Automatically establishes zero reading at startup
ALARM:	User selectable audible, visual, and vibratory alarms notify the user when the user defined set point is exceeded.
FLOW CONTROL:	Pulse Width Modulation (PWM) control ensures sampling rate of 1cfm (28.3lpm) +/- 10% in all applications.
REAGENT SETTINGS:	PAO-4, DOP, Ondina, PEG, Krydol, Corn Oil, Mineral Oil, Paraffin
DYNAMIC RANGE:	Up to 600 micrograms per liter
SENSITIVITY:	1% of readings ≥ 0.01% to 100%
REPEATABILITY:	0.5% of readings ≥ 0.01% to 100%
LIGHT SOURCE:	Solid State, rated for life of instrument
OUTPUT:	USB Connection
REPORTING:	Continuous, Summary, and Monitoring modes
PRINTER ACCESSORY:	Thermal Printer for hard copy of Summary Report
STANDARDS COMPLIANCE:	
Industry:	NSF A9, IEST, ISO-14644
Elec. & Safety:	CE, FCC, EN61010-1:2010, EN61326-1:2006



Service & Training @ ATI

OEM calibration, maintenance & repair

ATI Certified Operational, Service & Maintenance Training (ask for details)

Quality testing for HEPA filters & protective masks available at our ISO-9001 registered, NQA-1 & DOE audited Test Laboratory



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Digital Aerosol Photometer



The most advanced, innovative and user friendly digital aerosol photometer available today, the ATI 2i is portable, yet rugged, and the ideal instrument for in-situ filtration system integrity testing. Utilizing the iProbe provides full functionality away from the base unit, minimizing downtime and maximizing efforts in the field. The 2i is also available with a sealed sample train for use in nuclear and other hazardous environments.

Digital Aerosol Photometer

Innovative User Interface

The 2i base instrument's 4.3" Liquid Crystal Display gives life to the easy to use, menu driven interface. Aerosol measurements and pump sampling rates are prominently displayed for easy viewing. System parameters and selections such as alarm types, alarm set points and aerosol reagent are shown on the lower menu bar, while icons at the top of the screen give the status of connected peripherals, reporting functions, and aerosol noise suppression selections.

iProbe

The iProbe acts as an extension of the base instrument through a nearly identical user interface. All status and selection icons from the base unit are represented on the iProbe. With the press of a button, the sampling location can be remotely selected and switched by way of an electronically controlled valving system.

Data Reporting

Three unique report functions are now available with the 2i through the USB or optional thermal printer interface.

Continuous mode offers the same output as ATI's legacy photometers to ensure backward compatibility.

Monitoring mode provides the ability to collect data at user defined intervals for long term sampling.

Summary mode, which gives discrete reporting capability for individual filter locations, can output to the thermal printer to meet customer documentation requirements.

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ATI Photometer 2i
Serial #: 122455
Call Dup: 2 May 2013
Date: 3 May 2012
ID: FILTER 123
Setup: Internal Ref
Reagent: PAO
Actual Con.:
Spray Rate: 100
Start Time: 12:00
Leakage Alarm: 0.010%
Alarm Exceeded: No
Max Pen.: 0.0004%
Leakage Alarm: 0.010%
Alarm Exceeded: Yes
Max Pen.: 0.003%
Leakage Alarm: 0.010%
Alarm Exceeded: Yes
Max Pen.: 0.020%
End Time: 12:19
Scan Time: 3 min 24 sec
Operator:
```

Sample Report



Optional Printer

Performance Guaranteed

To ensure consistent results in all applications and altitudes, the sampling flow rate is constantly monitored and controlled via a pulse width modulated pump.

The 2i has been independently tested and qualified to ensure compliance with all applicable electrical and safety requirements.

Hazardous Environments

Designed for the rigors of nuclear and other hazardous applications, the 2i can be equipped with a unique, sealed sample train. The unit is engineered to allow safe removal and replacement of contaminated sampling components.

Simple maintenance

Annual NIST traceable calibration service is provided by ATI or an ATI-certified calibration facility. Calibration includes setting the aerosol reagent references, sample flow reference points, operating voltages, and servicing the light scattering chamber assembly.

Routine preventative maintenance entails cleaning and inspection of internal sample tubing and connections, the internal reference filter, and iProbe.



2i Base Display

Enhanced Features

Upstream aerosol mass concentrations are displayed in actual mass concentration values of micrograms per liter ($\mu\text{g}/\text{l}$).

User settable Aerosol Noise Suppression (ANS) allows for more stable aerosol measurements when poor mixing is present.



iProbe Display and Controls