



# 2i Digital Aerosol Photometer



**The most advanced, innovative and user friendly digital aerosol photometer available today**, the 2i is portable, yet rugged, and the ideal instrument for in-situ filtration system integrity testing. The iProbe, a handheld scanner with local LCD display and controls, enables the operator to change settings without stopping to adjust the base unit, minimizing downtime.



## Applications

- Independent filter certifiers
- Nuclear facilities
- Pharmaceutical manufacturers
- Medical facilities & cleanrooms
- Biosafety cabinets & fume hoods

## Key Features and Benefits

- Lightweight, portable and rugged digital photometer
- Large 4.3 in. LCD screen to display critical information
- iProbe (optional) with 12 ft cable, ideal for scanning hard to reach filters. Has all the key functionality of the main unit, minimizing downtime.
- User settable aerosol noise suppression for more stable aerosol measurements
- Printer (optional) available for reporting
- 2i-N models include a sealed sample train, enables safe removal and replacement of contaminated sampling components
- 2i-N models are compatible with ASME N511, ASME 510, ASME 509 and ASME AG-1



## 2i DIGITAL AEROSOL PHOTOMETER

### Innovative User Interface

The 2i base instrument's 4.3 in LCD 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.

### 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.



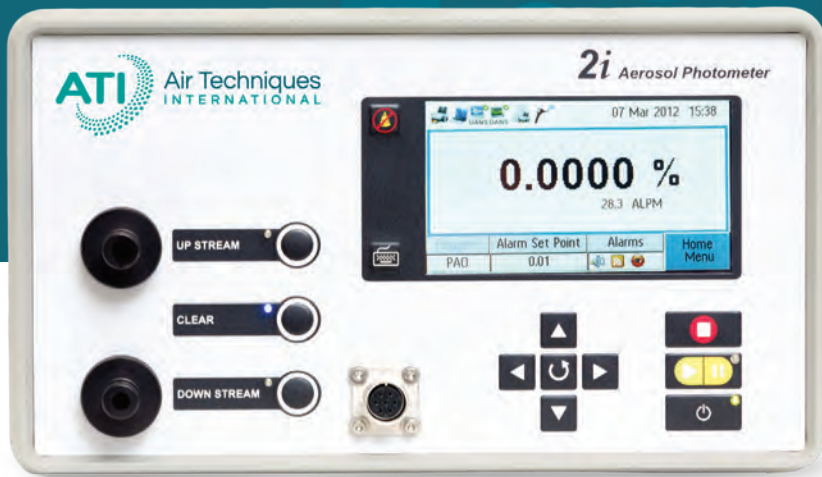
Optional Printer & Sample Report

### iProbe

The iProbe with a 12 ft cable 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.



iProbe Display and Controls



2i Base Display

## 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-N (the nuclear version of the 2i) is equipped with a unique, sealed sample train. The unit is engineered to allow safe removal and replacement of contaminated sampling components.

## Easy 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.

## 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.



## Protect your investment with a rugged water-proof carrying case

The optional 2i case allows you to bring your equipment wherever you may need it. With a rugged, water-resistant construction, it provides long lasting protection of your investment.



## 2i DIGITAL AEROSOL PHOTOMETER

### PRODUCT SPECIFICATIONS

|  |  |
|--|--|
| <b>Dimension (L x W x H)</b>                                   | 25.7 cm x 33 cm x 15.2 cm (13 in. x 10.1 in. x 6 in.)  |
| <b>Weight</b>  | 8.6 kg (19 lbs)  |
| <b>Power</b><br>Output Voltage<br>Input Voltage                | 100 to 250 Volts AC, 50/60Hz automatic adjustment<br>0.5 amps @ 120V, 0.25 amps @ 240V                             |
| <b>Auto Zero</b>   | Automatically establishes zero reading at startup  |
| <b>Alarm</b>   | User selectable audible, visual, and vibratory alarms notify the user when the user defined set point is exceeded. |
| <b>Flow Control</b>  | Pulse Width Modulation (PWM) control ensures sampling rate of 1cfm (28.3 lpm) +/- 10% in all applications.         |
| <b>Reagent Settings</b>  | PAO-4, DOP, Ondina, PEG, Krydol, Corn Oil, Mineral Oil, Paraffin   |
| <b>Dynamic Range</b>   | 0.0001 mg/m <sup>3</sup> to 120 mg/m <sup>3</sup>  |
| <b>Sensitivity</b>   | 1% of readings > 0.01% to 100%   |
| <b>Repeatability</b>   | 0.5% of readings > 0.01% to 100%   |
| <b>Light Source</b>  | Solid State, rated for life of instrument  |
| <b>Output</b>  | USB Connection   |
| <b>Reporting</b>   | Continuous, Summary, and Monitoring modes  |
| <b>Printer Accessory</b>                                       | Thermal Printer (Optional)   |
| <b>Standards Compliance</b><br>Industry<br>Electrical & Safety | NSF 49, IEST, ISO14644-3<br>CE, FCC, EN61010-1:2010, EN 61326-1:2006   |



### 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



Protecting People, Products & Critical Infrastructure

