

Aerosol Photometer • Ultimate

MODEL 3991



GTI 3991 is a light-scattering linear digital aerosol photometer that subverts the traditional design with advanced technology and scientific design.

- ◆ Large 8.4inch LCD Touch Screen
- ◆ GMP Three-Level Privileged Management
- ◆ Lithium Battery Power Supply
- ◆ Infrared Scanning Probe
- ◆ Built-in Thermal Printer



■ Innovative User Interface & Smart Setting & English Language

The 3991 not only boasts 8.4inch color touch screen, Chinese and English switching display, but is able to choose more and operate easier with innovative design. The functions of smart setting up are including test, setting, user, log, data, suppression coefficient, alarm limit, report mode, date and time and others.



■ Enhanced Features

The upstream aerosol concentration is displayed as the actual mass concentration value $\mu\text{g/L}$. The 3991 has a noise suppression function, which can avoid the influence caused by the unstable aerosol concentration value.

■ GMP Three-Level Privileged Management

The instrument has built-in GMP three-level GMP three-level privileged management (operator, parameters and administrator), which can freely set 100 roles and assign operation authority. Then a log report on the operation would be made successfully.

■ Built-in Lithium Battery

The 3991 comes with a built-in large-capacity rechargeable lithium battery, which can be used continuously for 4.5 hours. At the same time, the low power mode reduces the power consumption of the instrument when not testing which does help to make battery life longer.

■ Optional Reagents

Reagents: PAO, DOP, Ondina, PolyethyleneGlycol, Corn Oil, Mineral Oil, Paraffin Oil, etc.

■ Scanning Probe

The scanning probe is connected to the host through a 4m long air pipe, and various options can be set even when it is far away from the host, and the 1.8inch true-color display is displayed synchronously with the host. The scanning probe has a one-dimensional code scanning function, and the data is automatically classified and traceable.



■ Large Data Storage Capacity

The 3991 can store up to 100,000 sets of test data, and support real-time viewing.

■ Built-in Thermal Printer

The 3991 is able to achieve real-time printing equipped with with built-in thermal printer. The product has a USB communication interface, which can be connected with a computer to realize the transmission, storage and statistical analysis of test data.



■ Built-in Low Power Mode

The instrument has a built-in low power consumption mode, which reduces the operating power of the pump when the test is not in progress so that to improve the service life of the battery and the life of the pump.

■ Optional Sampling Ports

In addition to the standard internal rectangular sampling port without dead ends, round or square sampling ports are optional

After the HEPA filter is put into operation, if there are leaks or gaps due to insufficient installation, the predetermined purification effect will not be achieved, and a leak integrity test must be performed on the high-efficiency filter. Due to the low concentration of atmospheric dust upstream of the tested high-efficiency filter, it is necessary to use an aerosol generator to supplement dust generation to meet the test conditions. Use 3991 aerosol photometer to test the concentration of suspended particulate matter upstream of the high-efficiency filter and conduct a uniform-speed scanning test downstream to know the leak rate of the tested high-efficiency filter, which is convenient for the identification and quantification of leak points, and can be used as a reference for repair.

SPECIFICATIONS	
Model	3991
Data Accuracy	0.0001~100.0% 8.4inch Touch LCD Screen
Dynamic Range	0.0001µg/L~600µg/L
Accuracy	1% of Readings (0.01~100%)
Repeatability	0.5% of Readings (0.01~100%)
Flow Control	1cfm (28.3L/min) ±5%
Zero Building	Automatic or manually
Alarm Modes	Audible, visual and vibratory
Power-Saving Mode	Lower energy consumption
Reporting Modes	Continuous, Summary, Monitoring mode
Print	Built-in thermal printer
ID Encode	ID scanning, data classify and traceable.
Data Output	Storage, USB, Print; Logs can be traced and stored
Data Storage Capacity	100,000 Groups
Communication	USB is connected with PC continuous scanning testing is available.
GMP Three-Level Privileged Management	Contains three-level permission management, which can set identities and assign usage permissions; it can be done with Log Report
Language	English
Reagent Settings	PAO, DOP, Ondina, PolvethleneGlvcol, Corn Oil, MineralOil, Paraffin Oi, etc.
Sampling Port	Standard internal rectangular sampling port without unnecessary corners
Shell Material	SUS304 stainless steel
Temp. & Humidity	5~50°C (No condensation, no freezing); 5~95%RH
Storage Temp.	-20C~60°C (Relative humidity below 95%, no condensation)
Power	AC100~240V 50/60Hz or lithium battery (optional with built-in lithium battery pack)
Dimension	Approx.220x260 (handle 300) x 390mm (W x H x L)
Weight	11.1kg (photometer) probe and accessories 1kg
Reference complied	NSF49, IEST, ISO14644, EN61010-1:2010, EN61326:2006
What's included	Photometer, scanning probe, sampling air pipe, manual, certification, power cord, carrying case
Accessories	Lithium battery (built-in), AC/DC, circular sampling port, square sampling port

Note: In case of changes in products design, specifications, and parameters, the latest data provided by our company shall prevail without prior notice.



Applications

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

Key Features & Benefits

- 8.4inch color touch screen (English & Chinese)
- Built in thermal printer and equipped with thermal printing paper for real-time printing
- The scanning probe has one-dimensional code scanning function, automatic data classification, and traceability
- Large storage capacity, capable of storing 100000 sets of data
- Built in lithium battery, which lasts for 4.5 hours
- Built in GMP Three-Level Privileged Management which is able to generate operation logs
- Built in low-power mode to reduce instrument power consumption without testing

Carrying case

The 3991 is equipped with a carrying case for easy transportation and movement. The interior is scientifically designed, and relevant components are placed reasonably to protect the product for a long time.



Easy Maintenance

The annual NIST traceable calibration service is carried out by GTI or a partner certified by the GTI service system training, and can also be carried out by an authoritative certification agency. Calibration includes setting zero-point reconstruction and calibration, confirmation of flow rate and voltage, necessary cleaning and maintenance of optical system, replacement of zero count filter, etc. Routine preventive maintenance includes cleaning and inspection of internal sampling pipe fittings, zero-point reconstruction and confirmations.

DISTRIBUTOR