

CERTITEST® AUTOMATED FILTER TESTER MODEL 3140

FILTER TESTER FOR QUALITY
CONTROL MEASUREMENTS OF
HIGH-EFFICIENCY FILTERS

TSI's Automated Filter Tester Model 3140 utilizes the same, proven, oil-aerosol generator technology found in Models 8127 and 8130. It produces oil aerosol without heat, so a variety of oils can be used.



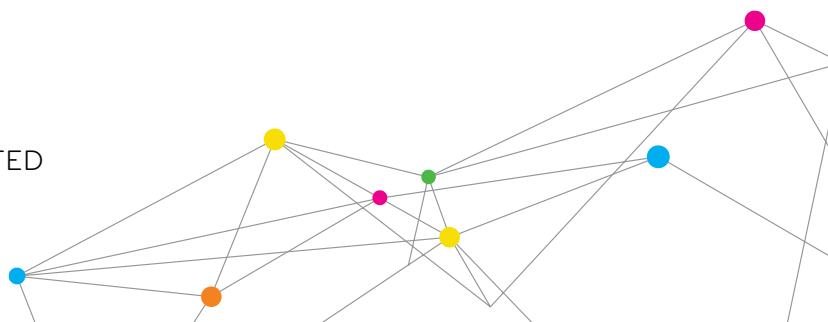
Two Condensation Particle Counters (CPCs) simultaneously count upstream and downstream particles. This enables quick, accurate, and repeatable measurements of filters with efficiencies as high as 99.999999%, or penetrations down to 0.000001%. A filter with 99.9999% efficiency can be tested in less than 15 seconds; higher efficiencies take slightly longer. The data output is displayed on a computer screen and can be automatically saved in a Microsoft Access® data base and exported into Microsoft Excel®.

Features and Benefits

- + Simple, fast and automated operation
- + Highly consistent test results
- + Designed for manufacturing environments
- + Service and support



UNDERSTANDING, ACCELERATED



SPECIFICATIONS

CERTITEST® AUTOMATED FILTER TESTER MODEL 3140

Aerosol Generation

Aerosol types	PAO, DOP, DEHS, paraffin and other oils (consult TSI)
Count median diameter	0.19 µm
Geometric standard deviation	<1.6

Aerosol Detection

Technique	Condensation Particle Counter (CPC)
Dynamic range	<0.01 to 10 ⁶ particles/cm ³

Aerosol Flow

Technique	TSI thermal mass flowmeter
Range	Adjustable from 5 to 100 L/min
Accuracy	±2% of reading

Pressure Measurement

Technique	Electronic pressure transducer
Range	0 to 150 mm H ₂ O (0 to 1470 Pa)
Accuracy	2% of full scale

Efficiencies

Operating range	Measures particle penetrations down to 0.000001% or efficiencies up to 99.999999% (eight 9's)
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Automation and Data Management

Laptop computer with custom software supplied

Outputs

Full report in both graphical and tabular form on laptop that can be printed using the supplied software. Other options, include saving the data to Microsoft Access® or exporting it to Microsoft Excel®

Built-in Internal Pump

Included

Filter Holder for Flat Sheets Media

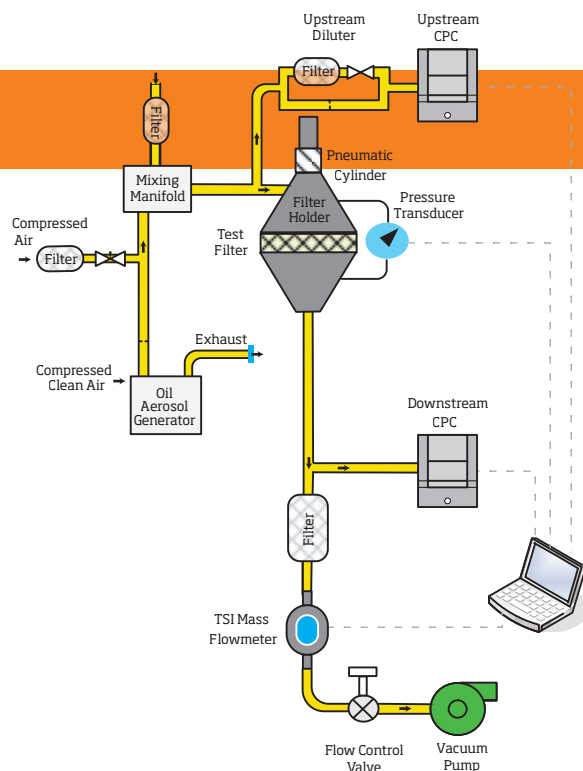
Included

Utility Requirements

Power	115 VAC, 60 Hz, 10 A or 230 VAC, 50 Hz, 5 A
Pneumatics	7 m ³ /hr at 415 kPa (4 scfm at 60 psi)
Dimensions (H x W x D)	183 cm × 122 cm × 81 cm (72 in. × 48 in. × 32 in.)

Weight

410 kg (900 lbs)



TO ORDER

Automated Filter Tester

Specify	Description
3140	Automated Filter Tester (115V, 60 Hz)
3140-1	Automated Filter Tester (230V, 50 Hz)

Includes a laptop computer, CPCs, built-in vacuum pump, pneumatically operated filter holder for flat sheet media, printer, and test media sheets.

Optional Accessories

Specify	Description
8134-xx	Custom filter holders for Model 3140
813010	Standard test media, 50 sheets
8107	External adapter for filter cartridges with hose type inlet and outlets

Service and Support

- + Field Installation and Training (subject to location)
- + Service Contracts
- + Field Service (contact your TSI representative for more details)

Specifications are subject to change without notice.

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