

Model 3160

Determines penetration vs. particle size of filters and filter media.

The Automated Filter Tester 3160 is the most advanced tester available for challenging filters and filter media with submicrometer aerosols. It can be used to test both low- and high-efficiency filters and filter media, up to 99.999999% efficient, or penetrations down to 0.000001%.

The 3160 uses a bank of atomizers - three for oil and three for salt - and the TSI® 3082 Electrostatic Classifier to challenge a filter or filter media with monodisperse particles. Two 3750 Condensation Particle Counters (CPCs) simultaneously count the number of particles upstream and downstream and computer software calculates the penetration value at each size. Filters can be sequentially challenged with up to 11 different monodisperse particle sizes from 10 nm to 1000 nm. At the end of a test, the 3160 generates a curve of penetration vs. particle size and produces a summary of test results, including the most penetrating particle size (MPPS). The quick test mode allows rapid testing of multiple samples at a single particle size, while minimizing operator exposure to aerosol. Test results can be automatically saved in a Microsoft® Access® data base and downloaded into Microsoft® Excel®.

The model 3160 complies with EN 1822-3, ISO 21083-1, and ISO 29463-5, and provides the most complete information on filter penetration available from any filter tester. You'll find it invaluable for product development and quality control.

