



SCS OMEGAMETER SMD 650

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Omegameter test systems from Specialty Coating Systems (SCS) are the industry standard for determining ionic contamination on printed circuit boards and assemblies using static test methodology. In fact, SCS' name is synonymous with automated ROSE (Resistivity of Solvent Extract) testing systems, which enable manufacturers to test for contamination, as defined by IPC-TM-650 (Test Method 2.3.25), for the purpose of process control.

The Omegameter SMD 650, the latest automated ROSE testing system available from SCS, utilizes the static extraction method to measure resistivity change when a substrate is submerged in ultra-pure test solution. The amount of change in resistivity indicates the level of contamination, which is often the result of residues from upstream manufacturing processes.

The Omegameter SMD 650 offers manufacturers the ability to test components nondestructively with a heated or non-heated test solution. IPC-TM-650 describes the benefit of a heated solution to "accelerate and improve the efficiency of extraction of ionic

material from poorly accessible regions, such as under surface-mounted components." In addition to increasing efficiency, a heated system also ensures temperature consistency of the test solution, whereas solution temperature in an unheated system can vary due to environmental conditions and the natural warming of test solution during recirculation. Variation in temperature yields less reliable results.

The software-controlled Omegameter SMD 650 provides unlimited storage of test profiles, which can be customized for easy identification by operators. Additionally, the software stores test results that can later be viewed, sorted, filtered, printed as full-size PDF files and/or exported into a spreadsheet for further analysis. Operator-specific privileges may be established through the use of password-protected user accounts.

The first static test system on the market, the SCS Omegameter has a long history of being an accurate, effective and practical quality assurance tool. The Omegameter SMD 650 continues this strong product legacy as the most trusted name in the industry.



OMEGAMETER SMD 650 PRODUCT BENEFITS

- Identifies presence of ionic contamination on bare and assembled printed circuit boards and other electronic components.
- Provides an accurate, repeatable and nondestructive method for determining cleanliness on location.
- Provides immediate process control results, eliminating the need for outside laboratory testing.
- Verifies proper cleanliness of surfaces prior to the application of conformal coatings or potting compounds.
- Complies with current industrial specifications such as ANSI/J-STD-001 and IPC-TM-650, and obsolete military specifications, e.g., MIL-STD-2000A.



OMEGAMETER SMD 650 FEATURES

- Self-contained system
- Simple, user-friendly operation featuring integrated computer and display
- Stair-step design allows for easier loading of parts into test cell
- Heated test solution for improved solubility of contaminants per IPC-TM-650
- Spray jets increase contamination removal
- Automated process identifies end of test

SOFTWARE FEATURES

- Proprietary Windows®-based software with touchscreen monitor
- Unlimited test profiles with custom names
- Runtime contamination graphs
- Sort, filter and review historical test results
- Full-size PDF test reports
- Password-protected user accounts
- Optional LAN connectivity
- Convenient USB port for peripheral keyboard, mouse, printer, etc.

OMEGAMETER SMD 650 SPECIFICATIONS

Power Input	220 VAC ±10%, 50/60 Hz, 6.5A
Dimensions (W x D x H)	43 x 29 x 54 in / 109.2 x 73.7 x 137.2 cm (with 26 x 26 in test cell)
Weight	252 lb / 114 kg
Solution Capacity	10 gal / 37.9 L
Test Cell Assembly Options	8 in x 8 in / 20.3 cm x 20.3 cm 12 in x 12 in / 30.5 cm x 30.5 cm 12 in x 18 in / 30.5 cm x 45.7 cm 18 in x 18 in / 45.7 cm x 45.7 cm 26 in x 26 in / 66.0 cm x 66.0 cm

INNOVATIVE SOLUTIONS FOR ADVANCED TECHNOLOGIES.

With over 45 years of experience and locations around the world, Specialty Coating Systems is the global leader in Parylene conformal coatings and technologies. This extensive coating and application experience is leveraged on each and every customer project, including the industry-leading systems that SCS designs and manufactures. From conformal coating, dispensing and cure systems to ionic contamination test systems, SCS equipment is used in environments that range from university and research labs to high-volume production facilities. SCS' proactive approach to production and quality requirements—testing, validating, documenting and processing—enables customers and their advanced technologies to meet the most challenging industry specifications and quality requirements.



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