

## AMT Transparent Anti-ESD Ink Enhances Product Functionality

Electrostatic discharge (ESD) is a potential risk that cannot be overlooked in many electronic products, especially in dry environments or applications involving high-speed friction. When the ESD from the environment or human body exceeds what an electronic component can withstand, it may cause component damage or system failure. Understanding the industry's need for ESD protection, AMT has developed and manufactured a proprietary anti-ESD ink that effectively dissipates static electricity, prevents ESD from reaching critical components, reduces the risk of damage to electronic products, and provides long-lasting ESD protection for a wide range of applications.

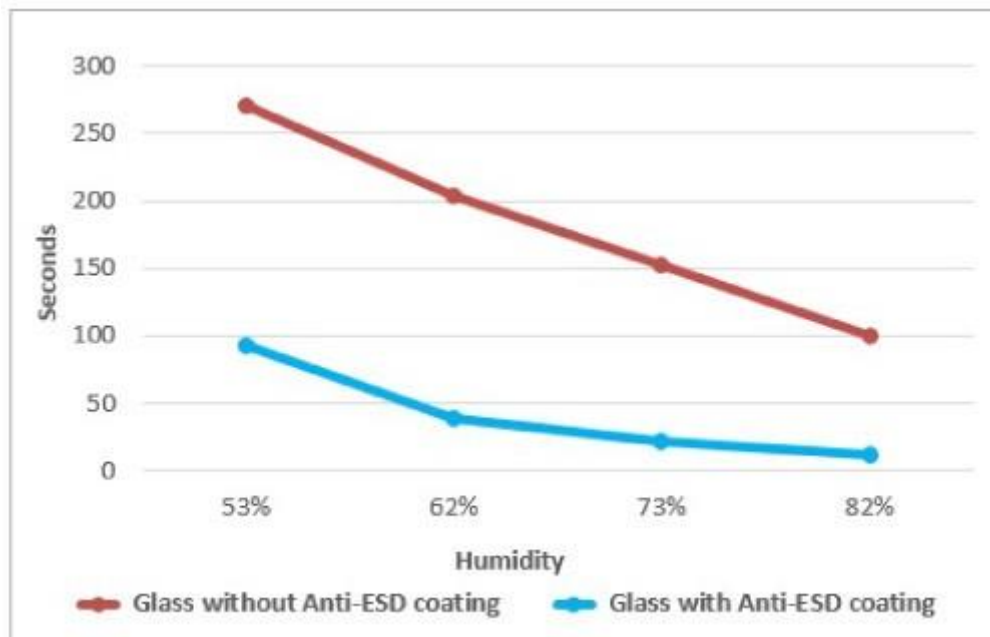
### Enhanced ESD Protection

AMT's proprietary anti-ESD ink is an optically clear ink formulated with carbon nanotubes. These carbon nanotubes offer outstanding conductivity, helping prevent the buildup of static electricity and enabling fast dissipation, which ultimately extends product lifespan. Key features of AMT anti-ESD ink include:

- Transparent and colorless; applicable to glass and most plastic materials
- Surface resistance of  $10^5$  to  $10^{10}$   $\Omega$ /sq for effective static control
- Transfers and dissipates static charge to conductive elements such as air or moisture
- ESD protection performance (based on IEC 61000-4-2, Class 4/Class B): Air Discharge:  $\pm 30$  kV / Contact Discharge:  $\pm 30$  kV
- Chemically tested for high stability
- Provides anti-dust adhesion functionality

### Complies with Testing Standards

We applied AMT anti-ESD ink to glass surfaces and performed ESD dissipation testing. Using an ESD simulator,  $\pm 30$  kV of static electricity was applied to the sample surface 10 times (once per second), and the time required for the charge to dissipate to below 0.1 kV was recorded. The results showed that, compared to untreated glass, the glass coated with AMT anti-ESD ink dissipated static charge significantly faster, ensuring protection of the product's electrical performance and preventing damage.



### Versatile Applications

AMT anti-ESD ink is transparent and colorless, suitable for use on clear materials such as glass and PET films, as well as on opaque plastic substrates. Without affecting the appearance of the product, it forms a highly effective static-dissipative coating that significantly enhances product reliability and safety. AMT anti-ESD ink is widely applicable to various static-sensitive products. Whether in end-user applications, product protection, manufacturing processes, precision instruments, or other critical systems, AMT anti-ESD ink delivers stable and long-lasting ESD protection.