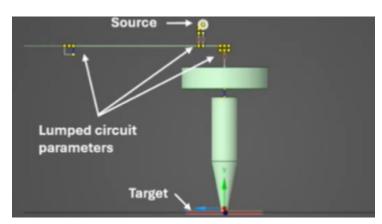
NEMA

Electrostatic Discharge

Electrostatic discharge (ESD) is a critical challenge in modern electronics, especially for handheld devices with LCDs, charging ports, and non-metallic enclosures. Contact ESD testing is preferred because it is easy to



control and quantify, but sometimes that is not an option. Electro Magnetic Applications, Inc. (EMA) has developed an ESD generator in Ansys Charge Plus to analyze and predict non-contact ESD using non-linear air chemistry combined with electrodynamics.



EMA non-contact ESD simulation:

- Exposes areas of vulnerability such as:
 - Secondary ESDs
 - Displacement currents
 - Field coupling through any seams and apertures
- Predicts coupled voltage and current waveforms at connector pins and PCB nets
- Prevents the over design or under design that might stem from traditional contact ESD testing methods

EMA consulting can be performed during the early stages of product development or after a device has failed ESD testing.

Head to ema3d.com to learn more.