System Solutions

Conductive Composites develops and delivers the highest quality, conductivity-based products and solutions to address existing and emerging markets. The unique nature of our technology provides the ability to create a wide range of solutions with excellent electrical and electromagnetic performance in otherwise nonconductive or underperforming materials systems. Utilizing the advantageous properties of our technologies, our customers and partners realize great benefits:

- Outstanding electromagnetic performance
- Integrated performance that is part of the materials system
- Improvements in strength and structural integrity
- Significant weight reduction
- Reduced or equivalent cost to traditional solutions
- Improved capabilities of flexible plastic & composite manufacturing
- Reduction of package size without compromising performance
- Improved corrosion resistance

Industries we Serve:
- Electronics
- Telecommunications
- Aerospace
- Security
- Medical
- Specialty Construction
- Consumer Products
- Defense
PROVEN SOLUTIONS

Utilizing our unique materials and expertise, our customers and partners are expanding capabilities while reducing the size and weight of their products. Applications include composite reflectors, antennas, shielded enclosures, structural adhesives, conductive coatings, lightweight cables and conduit, additive manufacturing, and lightning strike protection to name just a few.

**Cases and Enclosures:** We provide the materials and expertise for electromagnetic protection capabilities in lightweight formats such as molded thermoplastic cases or fiber reinforced cases for transit, load out, embedded systems and rack mount. Thermoplastic cases provide physical and electromagnetic protection in a lightweight economical platform, and are commercially available from Underwater Kinetics. Fiber reinforced laminate cases provide an ultimate combination of strength, weight, and shielding protection and are available directly from Conductive Composites.

**Conduit & Cabling:** Current efforts to shield cables and harnesses solutions are heavy. Lightweight composite cable and shielding provides high levels of EMI protection at 33% less weight and equivalent cost to legacy metallic shielding approaches.

**Antennas:** Conductive Composites materials are used to produce composite antennas that provide significant weight savings with equivalent or improved antenna performance over traditional metals.

**Reflectors:** Legacy satellite reflectors and uplink systems built of metal are bulky and heavy, and most composite approaches rely on secondary coatings that add weight, cost, durability, and corrosion concerns. Our integrated materials solutions enable significant space and weight reduction in a lightweight durable format, with outstanding reflective performance. Reflectors and components are commercially available from Eclipse Composites.

**Integration Products:** Typically products such as resins, paints, adhesives, sealants, molding compounds and other products do not provide any electrical conductivity or shielding performance. Conductive Composites’ variety of integration products use low loadings of our advanced materials to solve these conductivity problems while still retaining the fundamental properties and advantages of the system.