

PEAK NANO



FACT SHEET | 
PEAK OVERVIEW



PEAK FACT SHEET

MISSION

TO DEVELOP
**NANOSCALE
TECHNOLOGIES**
THAT DELIVER
**MACRO-SCALE
BENEFITS**

COMPANY FACTS

Company Data

- Founded in 2016, Peak is a global leader in nanoscale metamaterial design and manufacturing.
- U.S.-based engineering and manufacturing in Ohio.
- Peak technology has been awarded over 20 global patents.
- Peak's NanoPlex metamaterials are deployed in applications for defense, optics, energy, aerospace, power grids, fusion energy, and beyond.
- Leading the reshoring movement, Peak has invested over \$80 million in U.S.-based manufacturing.

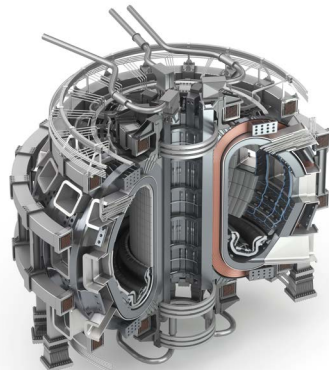
Peak Overview

Founded in 2016, Peak's core technology is NanoPlex™, a nanoscale metamaterial used for optics, capacitor films, and protective films used for defense, energy, aerospace, and communications. Developed through collaboration and research with Case Western Reserve University, Defense Advanced Research Projects Agency (DARPA), and the Naval Research Laboratory, our patented NanoPlex technology is manufactured in the U.S. and enables us to use nanoscale technology to solve macroscale problems.

We employ AI-based engineering and advanced manufacturing processes to produce optimized alternatives, from optics to capacitor films to protective packaging, based on our NanoPlex metamaterials. This solution versatility enables us to create new solutions that solve big problems, provide new capabilities, and optimize operations for our customers. Peak products are designed and manufactured in the U.S. with secure supply chains sourced from allied nations.

Warfighter Systems

Peak's HawkSight Optics are created using LGRIN (Layered Gradient Refractive Index) technology to simplify optics systems. Each LGRIN lens is designed using our HawkAI machine-learning software platform that tests millions of options and finds the right solution with the highest performance. Peak optics solutions deliver overmatch capabilities and enhance effectiveness for night vision, fire control, unmanned aircraft systems, and other optics-centric applications.



Fusion Energy

Peak's NanoPlex films are integrated into next-generation high-performance capacitors, enabling the ultra-high temperatures and immense power bursts necessary to fuel fusion reactor lasers and magnets. This integration enhances fusion effectiveness, efficiency, operational life cycles, and production readiness.



NANOPLEX™

PEAK NANOPLEX®

- NanoPlex is 100% US-engineered and manufactured
- NanoPlex unleashes up to 4X more energy storage with a 50% reduced footprint.
- NanoPlex improves efficiency and reduces the Total Cost of Ownership (TCO) for fusion energy generation systems.
- NanoPlex elevates the scale and stability of the U.S. power grid.
- NanoPlex capacitor films are a crucial component essential for multiple critical U.S. technologies.



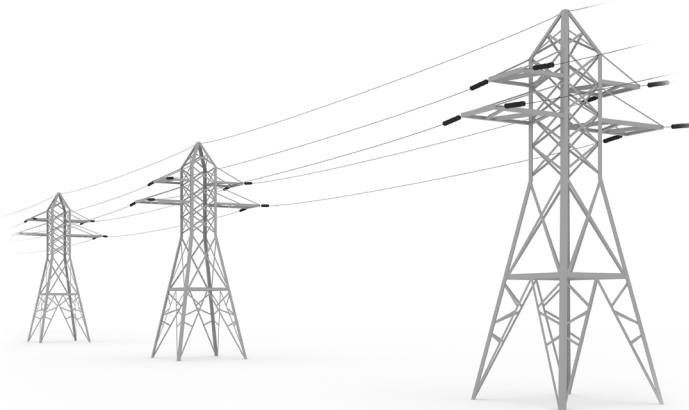
Aerospace

Peak’s NanoPlex films create new ways to manage the laws of physics. NanoPlex can provide the ability to control light and radio waves and regulate operating temperatures and atmospheric exchanges. Our specialty films in aerospace applications can help manage solar reflections to reduce light pollution or control temperatures to safeguard operational efficiency and extended lifetimes in extreme environments.



Power Grid

Global power grids, a hybrid of traditional and renewable sources, face the challenge of integrating diverse energies while ensuring predictable power delivery and meeting utility grid reliability standards (voltage stability, phase stability, and more). Leading power suppliers, capacitor designers, and mobile energy deployments leverage NanoPlex-based capacitors to guarantee that delivered power meets the demands of homes, industries, and other consumers.



Peak Looks Forward

Peak envisions numerous applications for HawkSight optics, including fire control, unmanned aircraft systems, drones, satellites, and other markets that require high-performance optics. NanoPlex capacitor films can be applied to a wide range of pulsed power applications, including electric vehicles, EMALS, and power charging stations. Our specialty films can be used in aerospace product packaging any application requiring precise atmospheric controls.



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