

FAB S and LAB S

Stellant Systems: Heritage & High-Power



Stellant Systems was founded toward the end of 2021, but they are not a newcomer to the electronics industry. The company traces its heritage back more than 90 years and includes some of the most recognizable names in the industry. What is now Stellant Systems started in Charles Litton's garage in 1932 and grew into Litton Industries. Howard Hughes' Electron Tube Laboratory got involved in 1959 and along the way to becoming Stellant Systems, there were multiple acquisitions and consolidations of divisions that operated under organizations like Sylvania, Loral, GM Hughes, Sperry, GE, RCA, Raytheon, Northrop Grumman and Boeing. Finally, after the merger of L3 Technologies and Harris Corporation in 2019, Arlington Capital Partners (ACP) bought the Electron Devices and Narda Microwave-West divisions from L3 Harris and renamed this entity Stellant Systems.

Stellant has expanded upon this heritage to become a \$300 million manufacturer, employing nearly 1100 people. The company specializes in components and systems for critical spectrum and RF power applications. Befitting its origins in Litton Industries and the Hughes Electron Tube Laboratory, Stellant is the only vertically integrated supplier of traveling-wave tube amplifiers (TWTAs) for space applications and the only U.S.-based manufacturer of space-qualified traveling-wave tubes (TWT).

However, Stellant manufactures more than tube-based products. In addition, the company develops and manufactures solid-state power amplifiers (SSPA) and active and passive control components from its 12 separate product lines that address four different markets. Stellant products are manufactured in five facilities in the U.S. and address opportunities in the space, defense, industrial and medical and scientific markets. In the space market, Stellant has been providing tube- and solid-state-based active products and passive components for more than 50 years. These products range from 1 to 70 GHz with output powers that can

exceed 300 W. The product offering for the defense market is even broader, with frequencies to 95 GHz and power levels for some tube-based products reaching 6 MW. In the medical and scientific and industrial markets, Stellant tube-based products are used in a broad range of applications.

Stellant's rich heritage of acquisition and consolidation has enabled a diverse, full-featured facilities footprint. The company has two facilities in California. The Torrance headquarters addresses space and defense markets. This facility also offers specialized capabilities in metalization, deposition, chemical processing, brazing, inspection and analysis. A Folsom facility addresses space and defense applications and provides environmental testing laboratories, laser welding, RF chip-and-wire assembly, test and inspection service capabilities. This facility also offers metalization, chemical processing, welding, brazing, high-power and environmental testing capabilities. A facility in Williamsport, Pa., houses 10 of the Stellant product lines that address all markets except for space. A Power Systems Technology group became part of Stellant through the Comtech PST acquisition. This group manufactures high-power SSPAs and control components, along with receiver protection products in Melville, N.Y., and Topsfield, Mass. In total, these facilities occupy slightly more than 800,000 sq. ft. and provide multiple Class 100,000 cleanrooms. All facilities are ISO 9001:2015-certified and all the facilities, except Topsfield, are AS9100-certified.

With a rich heritage and deep roots in high-power RF products and applications, Stellant continues to expand its size and capabilities organically and through acquisition. Stellant prides itself on performance, precision and durability, along with understanding the needs of the ecosystem. These principles are perfectly reflected by the belief that "together we can go further."

<https://stellantsystems.com/>