

HIGH-POWER MICROWAVE DEVICES FOR DIRECTED ENERGY APPLICATIONS



Magnetrons



Solid-State Power Amplifiers



Klystrons



Crossed-Field Amplifiers

all up to X-Band

Directed Energy Applications

- * Directed Energy Weapons (DEWs)
- * Power Protection for Integrated Defense Missions
- * High-Power Radar



Together, We Can Go Farther.

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HIGH-POWER MICROWAVE DEVICES FOR DIRECTED ENERGY APPLICATIONS



OVERVIEW

Stellant Systems, Inc. (Stellant) (formerly L3Harris Electron Devices) is a premier manufacturer of RF & Microwave amplifier devices both Vacuum and Solid-State with multi-megawatt in power output for Directed Energy applications. Stellant's knowledge of high-voltage and RF power engineering, gives them complete understanding that RF systems need components and interfaces that are refined to work together to achieve sound performance, reliability and ease of use.

Stellant has the most diverse product offering available in the industry including 14 distinct product lines and continues to work with Private Industry and US Government to develop High-Power Microwave (HPM) devices of all types.

MAGNETRONS

Stellant's Magnetrons provide up to 8-10 MW peak with frequency range from L- to X-Band.



Model	Frequency	Power
L4917	L-Band, (1280 - 1380 MHz) (tunable frequency)	1 MW peak
L4072	L-Band	8-10 MW peak
L4919	S-Band (2.8 GHz) (fixed frequency)	4.5 MW peak
L6170 (01, 03, 04)	X-Band (9275 - 9325 MHz)	1.7 MW Pk min, 1360 W avg 2 MW Pk min, 240 W avg 2 MW Pk min, 400 W avg

KLYSTRONS

Stellant's Klystrons provide up to 5.5 MW peak at various RF pulse lengths and duty.



Model	Frequency	Power
L5822	S-Band (2856 MHz)	5.5 MW peak
L6145	X-Band (9300 MHz)	5.0 MW peak

SOLID-STATE POWER AMPLIFIERS (SSPA)

Stellant PST manufactures high-power broadband SSPAs from stand-alone modules to rack-mounted systems in a 46,000 sq. ft. manufacturing facility in Melville, NY.



Model	Frequency	Power
BPMC3100-3500	S-Band (3.1 - 3.5GHz)	13,000 W peak
BMPC9X8-8000	X-Band (9 - 9.9 GHz)	8 kW Peak
BMCAP99109-1500	X-Band (9 - 10 GHz)	1.5 kW Peak

CROSSED-FIELD AMPLIFIERS (CFA)

Stellant has over 50 years experience manufacturing CFAs. They are suited for airborne, seaborne, and transportable applications. From L- to X-Band.



Model	Frequency	Power
L4153/L4253	L-Band	5.06 –15 MW* peak
L4719	S-Band (2.9 - 3.1 GHz)	525/2200 kW peak
L4756	S-Band (3.09 - 3.51 GHz)	1.0 MW peak
L4764	X-Band (9.5 - 10 GHz)	0.5 MW peak

* Maximum Peak Power Produced



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210,000 sq. ft.
ISO9001:2015 & AS 9100-2022



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46,000 sq. ft.
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