Type :- Press Release

Integra Technologies Introduces Industry-First Single-Device 10 kW High Voltage GaN/SiC Transistor for L-Band

---

Embargo Info

Under Embargo: No

Publication Date: 2026-05-27 4:00 AM

Company:

Click to view full Press Release

Content

El Segundo, Calif. — May 27, 2026 — Integra Technologies, a leading innovator of RF and microwave high power semiconductor solutions for mission-critical applications, today announced the industry's first single High Voltage Gallium Nitride on Silicon Carbide (HV GaN/SiC) 150V transistor, the IGN1030S10000, that produces 10 kW of pulsed saturated output power at L-Band, establishing a new industry benchmark for high-power L-band RF transistor performance.

Achieving this level of power from a single transistor represents a significant advance for RF power amplifier system designers. Traditional high-power architectures at L-band typically require power combining from multiple lower-power devices, increasing circuit complexity, insertion loss, thermal management demands and overall system cost. By delivering 10 kW from a single 150V HV GaN/SiC transistor, the IGN1030S10000 enables substantially simpler amplifier system architectures while reducing the size, cost, and complexity of high-power transmitter architectures. This part simultaneously enables smaller system volumes and increased system power density. The IGN1030S10000 is targeted at L-Band pulsed applications where peak power, efficiency and ruggedness are critical. Integra's 150V HV GaN/SiC technology can be leveraged at other frequencies for high-power, high-performance applications.

"As the pioneer of HV GaN/SiC Technology, Integra has spent years pushing the boundaries of what's possible for solid-state RF power — and achieving 10 kW of pulsed output power at L-Band from a single transistor marks our most defining milestone yet" said Suja Ramnath, "Every breakthrough in HV GaN/SiC single-transistor power performance translates directly into a strategic advantage for system architects building tomorrow's most critical platforms. Prior to Integra's HV GaN/SiC, the practical solid-state replacement of Vacuum Electron Devices (VEDs) was limited to 10 kW. Now, Integra has extended practical, solid-state replacement of VEDs to the megawatt level in high-power architectures — opening a new chapter for system architects long constrained by the limits of existing solutions. This is not incremental progress. This is a fundamental shift in what is possible, and Integra intends to keep leading it."

Integra Technologies is your partner to re-architect your system for best-in-class performance. The new 150 V GaN transistor is available for sampling to qualified customers. Contact Integra at www.integratech.com or reach out to your regional sales representative.

Supporting Videos:

https://www.youtube.com/watch?v=1ixhUJjQHD4

Tags:

Aerospace & Defense, Air Traffic Control, Drones, Electronic Warfare, Power Electronics, Radar, RF, Semiconductors

Contacts:

Contact Type: Media Contact
Name: Suja Ramnath
Email: sramnath@integratech.com

About Us:

Heading : About Integra Technologies

Founded in 1997, Integra is a leading innovator and global supplier of RF and Microwave high power semiconductor and amplifier pallet solutions for mission-critical radar, electronic warfare, avionics and communications systems. Integra's High Voltage GaN portfolio is enabling next-generation systems worldwide. For more information, visit www.integratech.com.