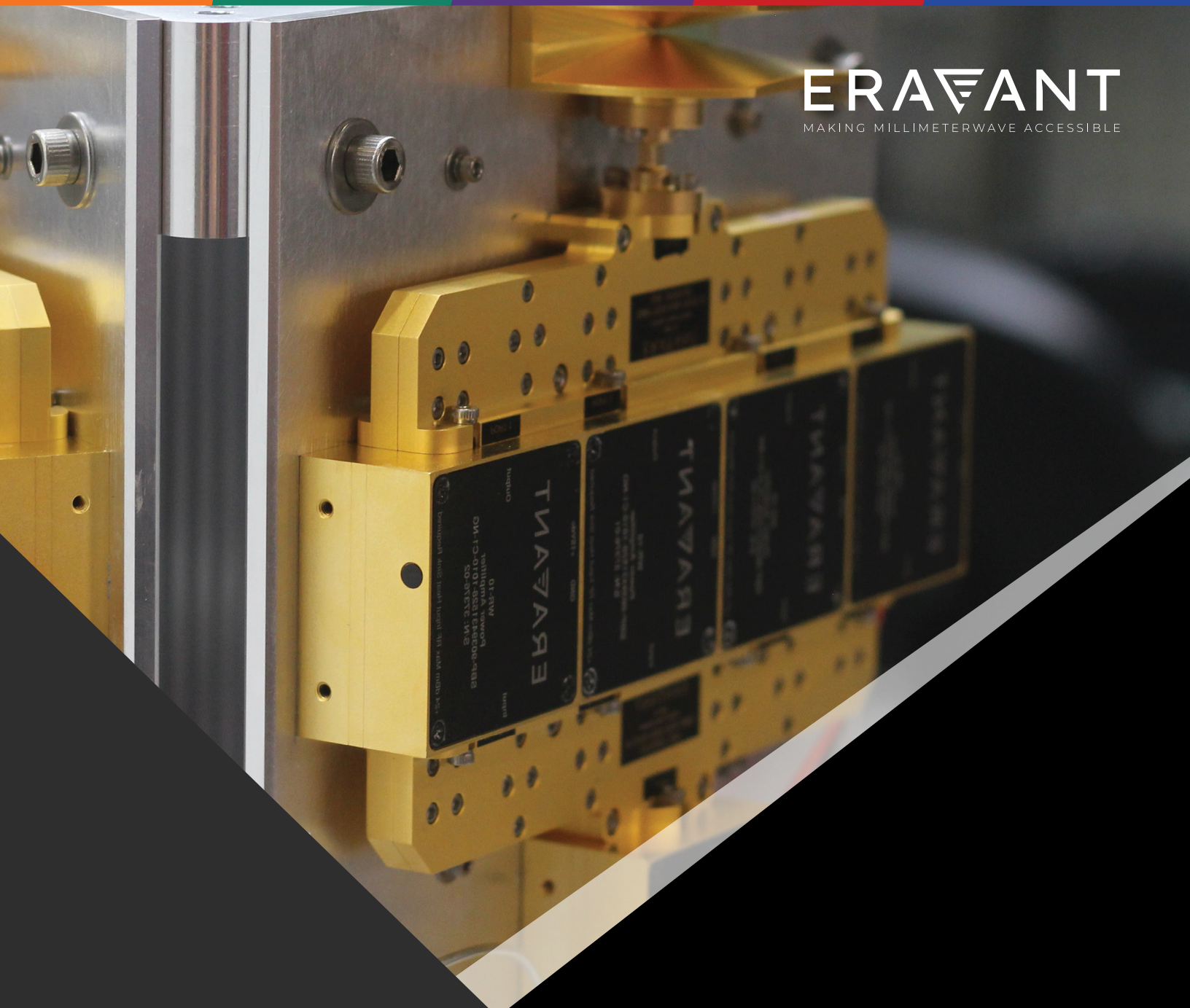
MILITARY A&D | COMMUNICATIONS | SEMICONDUCTORS | RADAR & SENSING | APPLIED SCIENCE

ERAVANT

MAKING MILLIMETERWAVE ACCESSIBLE



mmWave & Sub-THz

AMPLIFIERS

mmWave & Sub-THz

AMPLIFIERS UP TO 270 GHZ

Eravant offers a versatile lineup of amplifier solutions to support high-frequency applications across a range of industries including communications, radar and sensing, semiconductor testing, scientific research, and defense. Whether you're integrating complex systems or working in a lab environment, Eravant's amplifier families provide the performance, flexibility, and reliability required to meet demanding mmWave and sub-THz needs.

Our modular amplifiers, also known as "bare" amplifiers, are optimized for system integration. These compact modules serve as essential building blocks in many high-frequency architectures. Eravant offers three families:

- Broadband (SBB) amplifiers provide wide frequency coverage—often spanning multi-octave bandwidths from 0.1 GHz to 75 GHz or beyond.
- Power (SBP) amplifiers focus on delivering higher output power across specified bands, enabling enhanced system performance where signal strength is crucial.
- Low Noise (SBL) amplifiers are optimized for low-noise performance and high gain, supporting sensitive receive paths and front-end signal integrity.

Eravant's standard benchtop amplifiers come with coaxial or waveguide interfaces, solderable DC feedthrough pins, and mounting holes for easy integration. However, in lab settings or production test environments, they can present challenges—such as requiring external power supplies or being vulnerable to damage from exposed pins or repeated handling. To address these challenges, Eravant offers bench top amplifiers designed for plug-and-play use. Built with robust enclosures and powered by a universal AC input (100–240 VAC), these amplifiers are ideal for engineering labs, test benches, and production lines. They remove the complexity of external biasing and enhance test setup reliability and convenience.

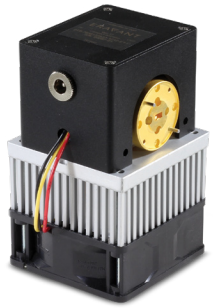
For environments where space, orientation, or portability are key, Eravant also offers a series of compact benchtop amplifiers. They offer internal voltage regulation and integrated thermal management but are powered from an external DC source, typically a compact AC-to-DC power adapter with a wide AC voltage range. They maintain AC power compatibility and active cooling while greatly reducing the overall amplifier footprint. The compact models are ideal for dynamic test setups, field use, and applications requiring flexible positioning, especially when waveguide interfaces are involved.

From compact system integration to robust lab deployment, Eravant's amplifier families are engineered to meet the evolving demands of high-frequency testing and system development. Backed by thoughtful design and technical expertise, our amplifier solutions help engineers accelerate innovation while ensuring signal integrity and performance.

Amplifiers are common components in many applications such as communication and radar systems, as well as Test & Measurement applications from antenna test ranges to filter tuning stations. They are designed and manufactured using advanced HEMT and PHEMT transistor technologies, MMIC devices, thin film technologies, and DC biasing techniques that deliver low-noise performance with broad operating bandwidths and superior gain flatness. **Custom designs are also available to meet specific requirements for all Eravant amplifier families.**

STANDARD BENCHTOP AMPLIFIERS

STB series standard benchtop amplifiers are always ready to serve a wide range of Test & Measurement functions. Provided with coaxial or waveguide input and output ports, they feature rugged construction and fully integrated power supplies for durability and ease of use.

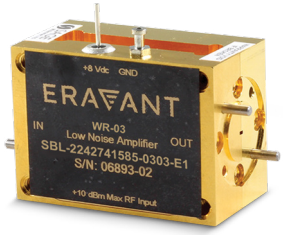


COMPACT BENCHTOP AMPLIFIERS

STB -C series compact benchtop amplifiers include built-in voltage regulation as well as a heat sink and fan for temperature control. They are ideal for production test stands and antenna test ranges where system components are frequently reconfigured.

BROADBAND MODULAR AMPLIFIERS

SBB series broadband amplifiers have coaxial I/O ports that operate from 0.1 GHz up to 95 GHz. A wide range of standard model focus on general purpose applications.



LOW NOISE MODULAR AMPLIFIERS

SBL series low noise amplifiers, or LNAs, are widely used in communication and radar receivers as well as high-performance instrumentation to achieve optimum sensitivity and wide dynamic range. They elevate weak signals that would otherwise be too faint to measure quickly and accurately. Eravant LNA's are available in various port configurations up to 270 GHz.

HIGH POWER MODULAR AMPLIFIERS

SBP series power amplifiers boost test signals for measurements involving non-linear devices or high levels of attenuation. They also bring marginal LO, RF and modulation signals into the optimum range of mixers, multipliers and phase detectors. High power amplifiers are available up to 110 GHz, 4W. Custom models with different output power levels and operating frequency ranges are available upon request

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For more information on Eravant's products, applications, or services, please visit: www.eravant.com
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