

ERIDAN

Wireless Built for the AI Era

Ultra-Clean Signal™ enables scalable AI networks built for surging demand. From autonomous devices to augmented realities, the next generation of technology requires a redefinition of wireless.



Eridan's Ultra-Clean Signal™ technology provides the seamless and scalable coverage that physical AI devices need.

Physical AI will only become more demanding

Generative AI will be expanded to take live physical data and synthesize it to make decisions regarding the movement, perception, and interactions between smart devices. Whether it be autonomous vehicles, industrial robots, or drone delivery systems, they will shift from being isolated mechanical systems toward interconnected fleets. These devices do not just process data locally; they must constantly exchange massive amounts of high-bandwidth sensory information with the network and each other to maintain safety and operational efficiency.

This surge in the number of devices places enormous demand on current wireless infrastructure. Legacy wireless networks are unfortunately riddled with interference and congestion, especially when too many high-bandwidth devices operate in the same vicinity. For a vision-guided robot or an autonomous vehicle, a millisecond of lag or a dropped data packet caused by signal noise isn't just an inconvenience—it is a critical failure point that compromises the reliability of the entire system. Today's devices rely on local computing to avoid unreliable networks, but the next generation of autonomous fleets requires constant, high-capacity sensory exchange to maintain safety.

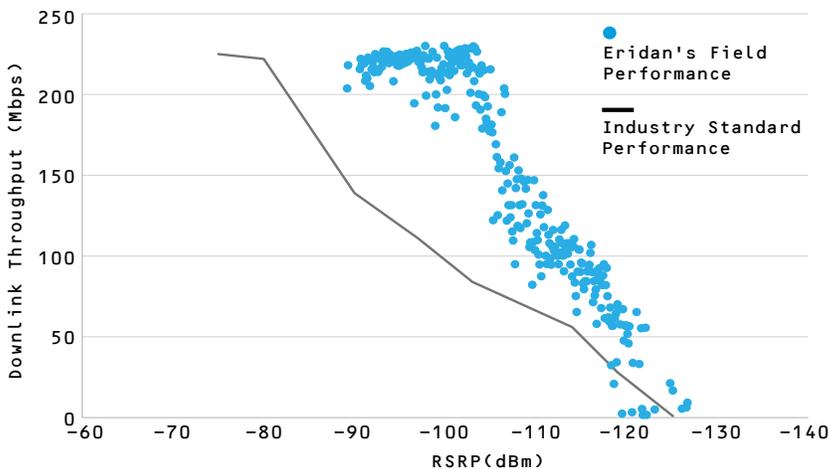


How Eridan scales networks for the future

Eridan addresses this unreliability by providing the Ultra-Clean Signal™ necessary to build truly resilient networks. By drastically reducing the “noise” and wasted energy inherent in legacy wireless systems, Eridan enables a more efficient, high-capacity pipeline. Eridan's Ultra-Clean Signal™ technology provides higher and more consistent capacity out to the wireless cell edge. This technical leap ensures that even as the density of smart devices increases, the network remains stable and responsive.

In addition to more consistent service in each cell, Eridan provides seamless handover between cells and unlocks distributed and scalable networks. Eridan maintains stable capacity further from the cell site, allowing base stations to be spaced further apart while ensuring handovers occur without the performance drops typical of legacy systems. Eridan's fully digital architecture allows for distributed MIMO as well: using multiple physically separated radios together to provide increased capacity and coverage diversity; a more scalable alternative to massive MIMO solutions.

Peak Throughput Performance 40MHz Downlink



The Future of Eridan: In Every Physical AI Device

Eridan's technological advantage is poised to expand far beyond cellular base stations. The core differentiation lies in the direct polar transmitter in GaN—a complete reinvention of the modern signal chain. Implementing this architecture in end devices specifically addresses the critical uplink bottlenecks prevalent in physical AI, enabling autonomous machines to stream massive datasets. As this system is miniaturized, every device from smartphones to humanoid robots will leverage Eridan's Ultra Clean Signal™ to maintain high-performance connectivity in an increasingly crowded network.