

IES.5G Product Brief



Scalable, zero trust architected, and edge-ready, the Integrated Edge Solution 5G is a rugged, compact, end-to-end private 5G standalone radio, core, and edge compute and connectivity solution providing ultra-reliable, low-latency bidirectional communication.



O-RAN/3GPP-COMPLIANT, VENDOR-AGNOSTIC

Deploy cores and radios from multiple vendors with different capabilities and price points to maximize flexibility and scalability.



■ UBIQUITOUS AND CONTINUOUS COMMS

Seamlessly connect edge nodes via terrestrial and non-terrestrial neworks including private 5G, WiFi, SATCOM, and much more.



COMPREHENSIVE NETWORK SOLUTION

Integrated RAN and 5G Core across single-server network-in-a-box (NiB) or multi-server architectures per your application or program need.



Solution Overview

Deploy a private 5G SA network in minutes on mobile edge hardware from Trenton Systems, protected by zero trust security from Zscaler® and powered by the latest Intel® technologies.

The IES.5G easily connects assets across environments, assuming no trusted zone in the network to guard data-at-rest, in-transit, and in-use against any vulnerabilities associated with using a private or public domain.

A private 5G Core coupled with CU/DU provides maximum flexibility, scalability, and reliability to enhance the performance of your network in the face of ever-evolving, complex workloads.

The IES.5G is a private cloud networking solution that allows you to easily configure your private 5G network while securely connecting a few to hundreds of thousands of users over short and long distances to deliver real-time actionable intelligence.

SOLUTION HIGHLIGHTS



Intel® vRAN Boost and QAT deliver high-speed, low-latency confidential computing and connectivity at the edge.



Intel® PFR, SGX, TME, and TDX provide chip-based protections of firmware, data, applications, hypervisors, and virtual machines.



Zscaler® ZIA and ZPA ensures fully authorized and authenticated user access to the Internet, applications, and services.



FedRAMP High and TIC 3.0 compliant to protect sensitive cloud data while ensuring trusted internet connections for agency risk management.



OpenRAN software implementation, orchestration, and management with on-call SMEs controlling network upgrades, updates, and functionality.



Network slicing, VNFs, and CNFs improve scalability, flexibility, and resource usage while drastically reducing hardware costs.



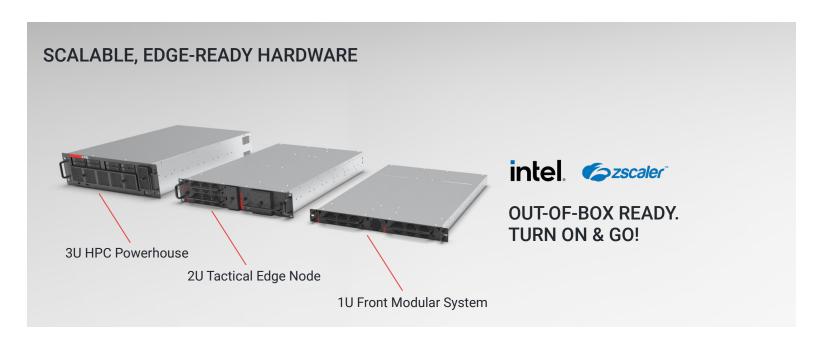
Ruggedized for extremes to withstand dust, dirt, water, and debris as well as extreme shock, vibe, temperature, and humidity.



TAA compliance is achieved because all Trenton solutions are manufactured with components from approved vendors in the USA.



Vetted supply chain helps navigate supply chain complexities and protects your system from counterfeit electronic components.



Technical Specifications

SPECIFICATION	DETAILS
CPUs	High/low core count 3 rd /4 th Gen Intel® Xeon® SP or Xeon® D
Memory	High-frequency DDR4/5 ECC RDIMM slots (up to 24x slots)
Storage	High-capacity, self-encrypting drives (FIPS 140-2/3 available)
Form Factors	1U - 3U rack servers (~ 24" depth); SFF computers (~9.375" depth)
Network Interface	1, 10, 25, 100 GbE SFP+ ports with IPMI
PCIe Interconnect	PCIe Gen 4/5 slots (Up to 11x slots)
Power	461-filtered, redundant, removable
Certifications	MIL-STD-461, MIL-STD-810, MIL-STD-901, IP67, DO-160

With size, weight, power, and cost (SWaP-C) optimized rack mount servers and small form factor computers, the **IES.5G** can be stored inside transit cases, factories, vehicles, and other constrained spaces.

Modular network infrastructure with zero-trust security allows you to easily scale 5G OpenRAN software and applications alongside evolving network demands while adding as many users as necessary. Hardware can be configured or expanded to meet the technical and performance requirements of your specific use case.

Contact Us for pricing and availability.

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