



# Oceus 5G Core (O5GC) Solutions

## Tactical and Enterprise 5G Communications Systems

### Your Source for the Fastest, Most Reliable Connectivity

With significantly faster download, upload and drastically reduced latency, the future of mobile broadband connectivity is 5G. This generation of mobile broadband will eventually replace, and in the near-term, augment 4G LTE connections. Oceus customizes solutions using cutting-edge wireless technologies, offering the fastest and most reliable connectivity to government and commercial customers.

Oceus offers two categories of 5G communications systems: Tactical and Enterprise Systems. These systems provide solutions for use cases that range from the very simple to complex – from the simple, single tactical on-the-move system to a campuswide enterprise with smart warehouses and roaming from your private enterprise network to carrier networks.

### Oceus 5G Tactical Edge Communication Systems

Today's modern combat operations require more data, faster decisions, and improved data security. Oceus 5G Tactical Edge Communication Systems are built on the company's foundation in tactical broadband communications over the last decade. Critical to this foundation is standards-based, commercial solutions that remove stovepipes from DoD systems.

#### KEY BENEFITS

- Secure, scalable, on-the-move mobile communications
- Tactical broadband communications and networking solutions based on 5G New Radio (NR) and New Core (NC) technology and infrastructure

- Site efficiency
- Commercial off the Shelf (COTS) technologies
- Allows on-the-move communications in a degraded, intermittent, latent, and contested Electronic Warfare (EW) RF operational environment
- Enhanced coverage
- Brings new capabilities to the military, including enhanced mobile broadband, ultra-reliability, and low latency
- Increased communication data rates to gigabit speeds with less than 20ms latency
- Improved cell-edge throughout

# Oceus 5G Enterprise Communication Systems



Our Enterprise 5G Communication Systems include a combination of different radio and antenna configurations to meet each unique site-specific performance needs, optimizing the total cost of ownership.

## KEY BENEFITS

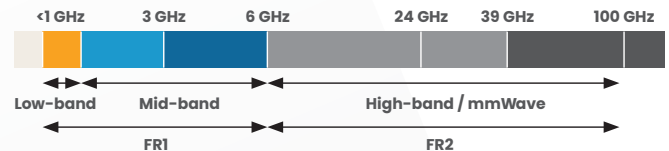
- Best-in-class solutions for improved throughput, latency, and system security
- Enabling massive MIMO, network slicing, and SDN with orchestration
- Commercial carrier-grade 5G nonstandalone (NSA) and standalone (SA) core networks
- Radio and antenna configurations for Massive MIMO up to 64 TX/64 RX
- Radios for sub-6 GHz and mmWave
- Dual and triple band radios for sub-6 GHz
- Distributed cloud core networks across edge sites, aggregation sites, and central data centers
- Enable smart networking
- Campus-wide deployments
- Increased device density of up to 1 M per square kilometer
- Dynamic spectrum sharing allows a single base station to support both 4G and 5G devices simultaneously by reallocating radio blocks every 1 ms

Oceus is the low-risk choice for the design and delivery of Enterprise and Tactical 5G solutions thanks to our extensive government field experience in deploying cellular-based systems for more than a decade.

## 5G Communication Systems Features

### KEY FEATURES

- Radio frequency diversity
- Indoor and outdoor basebands
- Ideal for private networks
- More secure than WI-FI
- A move to cloud deployments to support diverse geo locations
- Massive IoT / Broadband IoT for sensors, smart metering, and asset management
- Radio transmission over two wide regions of spectrum



While others are talking about what 5G can do, Oceus is delivering it.

Through collaboration with industry leaders and key partnerships, Oceus is focused on broadband systems that help our customers achieve their missions. Communication is a critical asset, and we are dedicated to providing reliable, continuous, and superior communications.

We are experts in compact, ruggedized, powerful wireless technology, and our subject matter pedigree extends beyond that into enterprise cellular solutions, where ease of use and Commercial Solutions for Classified (CSfC) certified security is of the utmost importance.

To discover more about Oceus private 5G solutions, visit us at [Oceus.io](https://oceus.io).

## About Oceus

Oceus empowers government and commercial enterprise with intelligent private 5G communications for uninterrupted critical operations in challenging environments where deterministic delivery of data in a wireless environment is critical: in-building, campus-wide, and on-the-move.

Oceus delivers advanced wireless network infrastructure with the mobility, security, and performance needed for seamless connectivity. Our edge computing capabilities provide low latency, ultra-high reliability, and enhanced security for wireless IoT devices and applications. The Oceus Intelligent Controller provides software-defined network orchestration using AI/ML to automate the management of 5G enterprise systems and applications for military operations, border security, disaster response, smart cities, logistics, transportation, manufacturing, healthcare, education, utilities, and energy.

Oceus is headquartered in Herndon, VA, with Oceus Technologies, our R&D lab, and our Integration and Operations Center both located in The Colony, TX.