

The **GEOBLUE iCell TANK** is a **rugged, compact, all-in-one 5G NR gNodeB**, purpose-built for secure, high-performance wireless networks in **military, defense, and mission-critical environments**. Engineered for reliability under the toughest conditions, it delivers **ultra-low latency, high-speed connectivity**, and hardened security for critical operations.

#### **Private 5G - Total Control, Maximum Security**

Deploy a **dedicated, interference-resistant network** that outperforms traditional Wi-Fi. The iCell TANK enables secure, real-time communication for:

- Tactical operations and autonomous defense systems
- Advanced industrial automation and robotics
- Critical IoT and sensor networks
- Secure edge computing and mission-critical applications
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#### **Integrated, Rugged Architecture**

- Fully **software-defined radio (SDR)** combining **Radio Unit (RU), Distributed Unit (DU), and Central Unit (CU)** in one robust device
- Supports **70 MHz – 6 GHz**, including **5G n78 (3.5 GHz)** with **up to 30 dBm transmit power**
- Flexible deployment for **private networks, edge applications, and testbeds**

#### **High-Performance, Secure Design**

- **16GB RAM and 1TB eMMC storage** for high-throughput and edge processing
- **2.5GbE RJ45 port** with hardened networking
- **Zero-touch provisioning** and **N2 interface** for seamless integration with secure 5G Core Networks

#### **Built for Extreme Environments**

The iCell TANK is **rugged, resilient, and mission-ready**, delivering **reliable, secure connectivity** wherever operations demand it, whether in tactical command centers, military facilities, or edge deployments.

**iCell TANK**

Full-Software Defined GNode

## KEY FEATURES

- Integrated **5G NR gNodeB (RU+DU+CU)**
- SDR chipset supporting **70MHz - 6GHz**
- Supports multiple **5G bands: n40, n41, n48, n77 and n78**, with up to **30 dBm RF Tx power**
- Built-in antennas
- **Intel® Core™ Ultra 7, 16GB RAM, 1TB eMMC**
- High-speed **2.5GbE port**
- **N2 interface** for external 5G Core connectivity

## 5G NR FEATURES

|                              |                                                                                                                   |
|------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Standard                     | 3GPP R15/R16                                                                                                      |
| Number of Cells              | 1 x 2T2R                                                                                                          |
| Cell Capacity                | 200 RRC users per cell                                                                                            |
| Cell Throughput              | DL 634 Mbps, UL 209 Mbps (DDDSU) DL 293 Mbps, UL 574 Mbps (DSUUU)                                                 |
| Operating Frequency Band*    | N40:2300-2400MHz;<br>N41:2496-2690MHz;<br>N48(CBRS): 3550-3700MHz;<br>N77/N78: 3400-3800MHz;<br>N77: 3800-4100MHz |
| Channel Bandwidth            | 5MHz/10MHz/20MHz/40MHz/50MHz                                                                                      |
| Max RF Output Power          | 1W                                                                                                                |
| Duplex Mode                  | TDD                                                                                                               |
| Subcarrier                   | 30 kHz                                                                                                            |
| Clock Synchronization Method | 1588V2 clock synchronization                                                                                      |

### \*Versatile through Varied Hardware RF Front Ends

GEOBLUE's state-of-the-art Software-Defined Radio (SDR) equipment comes equipped with an array of distinct hardware RF front ends.

This versatility empowers you to implement Block Edge Masks with precision, for example providing crucial protection for Radiolocation services operating in the 3.1-3.4 GHz band.

