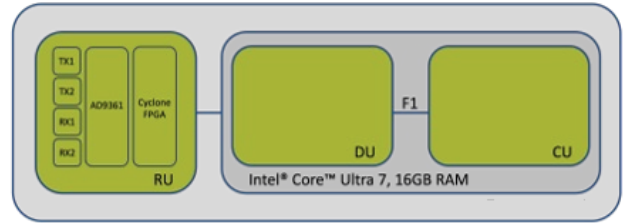


The **GEOBLUE iCell NEO** is an advanced indoor connectivity solution, a powerful 5G NR gNodeB integrated into a single, and compact device. It provides secure, high-speed, and low-latency wireless connectivity.

With **Private 5G**, organizations can build their own dedicated wireless networks, offering enhanced performance, reliability, and security compared to traditional Wi-Fi. **This enables a wide range of innovative use cases**, including real-time data transmission for medical devices, autonomous robots in healthcare and manufacturing, advanced building automation, seamless IoT device integration, and ultra-reliable connectivity for business-critical applications.

At its core, the **iCell NEO** features a **fully software-defined radio architecture**, combining the Radio Unit (RU), Distributed Unit (DU), and Central Unit (CU) in a single, integrated platform. Supporting frequency ranges from **70 MHz to 6 GHz**, including **5G band n78 (3.5 GHz)** with up to **30 dBm transmit power**, it enables highly flexible deployment for private networks, testbeds, and edge applications.

With 16GB RAM, 1TB eMMC storage, and a 2.5GbE RJ45 port, the **iCell NEO** is built for **high-throughput applications** and powerful edge processing. It supports **zero-touch provisioning**, while the N2 interface enables seamless integration with external **5G Core Networks**.



iCell NEO

All-inclusive indoor solution
Full Software-Defined GNode



GEOBLUE's Software-Defined gNodeB is the key to an agile, cost-effective, and future-proof 5G network.

Flexibility and Upgradability:

Stay ahead of the competition by rapidly deploying new features and functionality without hardware modifications.

Adaptable solutions that respond to evolving use cases and technologies.

Minimize network disruption while maximizing your network's potential.

Cost-Efficiency:

Reduce upfront investment with our cost-effective software-defined gNodeBs.

Optimize resource utilization and extend the life of your hardware.

Easily manage and update software remotely, lowering maintenance costs and streamlining operations.

Network Slicing:

Perfectly tailor your network to various applications with ease.

Dynamic resource allocation ensures superior quality of service.

Provide the performance required for diverse network slices.

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; N41:2496-2690MHz; N48(CBRS): 3550-3700MHz; N77/N78: 3400-3800MHz; 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.

