

# Spirent 5G gNodeB Emulator

## A component of the 8100 5G Mobile Device Test System

The 5G gNodeB (gNB) emulator is an integrated element of the Spirent 8100 5G Mobile Device Test System. The 8100 5G provides end-to-end (E2E) 5G network emulation from the radio network to the core/IMS network.

### Designed for Mobile Device Design Validation Testing (DVT) and Operator Acceptance Testing

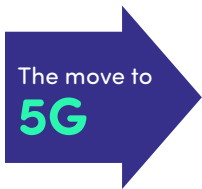
The 5G gNB emulator enables mobile device design validation testing (DVT), operator acceptance testing and other testing which requires E2E 5G network emulation.

To facilitate chipset vendors to reduce development time, optimize data service capabilities, and maximize return on investment, 5G gNB emulators can support radio protocol DVT, system level DVT, chipset platform DVT, and other 5G NR radio related testing.

### The SR9860 Platform

The SR9860 is the 5G gNB platform that provides the New Radio (NR) capability, which is the foundation to realize all the 5G committed functions.

An evolutionary upgrade to  
**Spirent's 8100 Automated Mobile Device Test Solution**



SR9860 Platform 5G gNB Emulator

**Spirent** mobile expertise, trusted advisor and world-class support

- Test & Analysis Software
- Test Execution Software
- Network Emulation Software
- System Design & Integration

Future-flexible **NI** Hardware Platform



## About Spirent

Spirent Communications (LSE: SPT) is a global leader with deep expertise and decades of experience in testing, assurance, analytics and security, serving developers, service providers, and enterprise networks. We help bring clarity to increasingly complex technological and business challenges. Spirent's customers have made a promise to their customers to deliver superior performance. Spirent assures that those promises are fulfilled.

For more information visit:  
[www.spirent.com](http://www.spirent.com)

The SR9860 can function in two configurations with FR1 FDD or TDD NR:

- **Standalone mode**, where the 5G control plane and user plane connect with the core network directly (either a 5G core or 4G ePC)
- **Non-standalone mode**, where the radio network control plane from the core network is managed by an LTE eNB with which the 5G gNB connects

### Key Platform Capabilities

| NR Bands            |   |
|---------------------|---|
| Network options     | Option 3x, Option 2   |
| Spectrum            | All applicable FR1 TDD NR bands validated with n41, n77, n78, n79<br>All applicable bi-directional FR1 FDD NR bands validated with n5, n66, n71 |
| Carrier Bandwidth   | 5MHz, 10MHz, 15MHz, 20MHz, 60MHz, 80MHz, 100MHz   |
| Sub Carrier Spacing | 15kHz, 30kHz  |
| MIMO                | Up to 4 TRX, up to 4 DL streams, up to 2 UL streams   |
| 256 QAM             | UL & DL   |

### Key Facts

- 3GPP-compliant RF waveform for RF design/testing
- 3GPP-compliant NR L1-L3 for protocol design/protocol testing
- Built-in 3GPP-compliant X2 interfaces for NSA and SA functions
- Smooth upgrade for existing 8100 series products to support E2E 5G service integration testing

### Key Features

- State-of-the-art PXI compact platform, future-proof investment for new capability expansion (mMTC, URLLC)
- SW-defined radio device enables flexibility in various purpose testing

### Platform Physical Characteristics

- Power supply: AC
- Total weight: 26.5kg
- Power consumption: typical: 478W, max. 562W
- Dimension: W\*D\*L 46.48\*49.23\*26.22cm (18.3\*19.38\*10.32in)

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