

# SPIRENT GSS5300

## MULTI-RADIO WIRELESS CONNECTIVITY FUNCTIONAL TESTER

An easy-to-use product supporting rapid simultaneous functional testing of up to 2 wireless enabled devices with multiple RF interfaces including Wi-Fi, Bluetooth, NFC and FM Radio plus GNSS signal distribution and level control

### Applications

- Manufacturers:
  - Build Verification
  - Trend Analysis
  - Regression Test
  - Functional/Final Test
  - Service/Repair Test
- Developers:
  - Flexible, Controllable Signal Source
  - Basic Parametric Analysis

The GSS5300 Multi-RF Generator is designed specifically for simultaneous functional, non-parametric test of multiple integrated wireless communications solutions. Features such as GPIB and Ethernet interfaces are included for ATE integration, with rack mount chassis to facilitate use of the GSS5300 in the volume manufacturing test, and service/repair testing environment.

The GSS5300 Multi-RF wireless connectivity tester addresses a range of RF signalling, including 802.11 a/b/g/n Wi-Fi, Bluetooth, NFC and FM Radio. The GSS5300 is particularly recommended for independent functional and radio connectivity testing of up to two fully assembled devices in the final stages of manufacture. Multiple GSS5300 can be combined easily to enable testing of four or more devices simultaneously.

The GSS5300 is fully compatible and interoperable with Spirent's GNSS range of signal generators and features an internal GNSS signal distribution element with independent level control.

The GSS5300 represents excellent value and affordability, enabling testing that ensures correct assembly procedure and verification of expected performance parameters including:

- 802.11a/b/g/n connectivity
- 802.11a/b/g/n transmit power
- Bluetooth connectivity
- Bluetooth transmit power
- NFC connectivity
- FM Radio reception (inc RDS)
- FM Radio transmission (with audio output)

Plus when combined with Spirent GSS6300, GSS6700:

- GNSS C / No Calibration
- GNSS Doppler Estimation
- GNSS Sensitivity Testing

### Key Features

#### Independent testing of multiple devices

- Single port or dual port test systems
- Multiple device support with two or more systems operated together

#### Integrated GNSS Signal Distribution

- With level control

#### Multi RF Communications Support

- Wi-Fi 802.11a/b/g/n
- Bluetooth 3.0/HS
- FM Radio (Tx & Rx)
- NFC

#### Exceptional Performance

- Wide power level dynamic range
- Fine power level control
- Excellent stability

#### Ease of Use

- Independent RF connections for all signals
- Ethernet, GPIB (IEEE-488) interfaces supplied as standard
- Control over all parameters from SimCHAN application



GSS5300 Multi-Radio Tester

# SPIRENT GSS5300

## MULTI-RADIO WIRELESS CONNECTIVITY FUNCTIONAL TESTER

### SPECIFICATION

- Number of devices-under-test supported 1 to 2 in a unit  
4 + with Multi-units

#### Signals Supported:

- Wi-Fi 802.11b/g/n @ 2.4 GHz, 802.11a/n @ 5.0 GHz
- Bluetooth 802.15.1 v3.0 with HS @ 2.4 GHz
- NFC @ 13.56MHz
- FM Radio @ 76-108 MHz with RDS transmission
- GNSS (distribution with independent level control)

#### Incident Power control:

- Wi-Fi (resolution 0.25dB, accuracy ±0.5dB RSS) -5 to -65dBm (Access point ERP = 0dBm)
- Bluetooth (resolution 0.25dB, accuracy ±0.5dB RSS) -10 to -70dBm (Tx ERP = +4dBm)
- NFC (Two state) 1cm or 5cm equivalent
- FM Radio transmission (resolution 0.25dB, accuracy ±0.5dB RSS) -20 to -80dBm
- GNSS (from external source, resolution 0.25dB, accuracy ±1.0dB RSS) ±60dB power output range.

#### Device under test Transmit Power Measurement

- Wi-Fi Range +15 to -5dBm Accuracy ±2.0dB
- Bluetooth Range +4 to -20dBm Accuracy ±2.0dB
- FM Range +10 to -10dBm Accuracy ±2.0dB

#### Connectivity

Primary RF outputs (independent):

- Wi-Fi, Bluetooth, GNSS Coaxial 'TNC' type socket
- FM Radio Coaxial 'BNC' type socket
- NFC Fischer type socket
- Control Ethernet TCP/IP IEEE-488 (GPIB) as standard
- AC Power 100-240V, 50/60Hz, 80W (typical)

#### Chassis Dimensions

- Size (W x D x H) 449 x 386 x 89 mm  
(17.75 x 15.25 x 3.5 inch)  
19 inch, 2U format  
(also suitable for desktop)
- Weight (approx) 10.0 kg (22 lb)

#### Product Specifications (MS3084) are available on request

Performance figures and data in this document are typical and must be specifically confirmed in writing by Spirent Communications plc. before they become applicable to any particular order or contract.

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For current product data, visit the Spirent websites at [www.spirent.com/positioning](http://www.spirent.com/positioning) or [www.spirentfederal.com](http://www.spirentfederal.com)



GSS5300 with GSS6300M GNSS Generator

#### SALES AND INFORMATION

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