

IQgig-5G[™] Fully Integrated 5G mmWave Test System

Overview

The IQgig-5G is a fully-integrated, non-signaling solution for testing 5G mmWave products. All signal generation, analysis, and RF front-end routing hardware are self-contained inside a single chassis. The IQgig-5G has over 1.4 GHz of instantaneous bandwidth, supporting all 3GPP carrier aggregation test cases. The IQgig-5G solution has four bi-directional source and measurement ports each with 2.4 mm connector coaxial interface.

Fully Integrated 5G mmWave Test System

The IQgig-5G is the simplest solution for testing 5G mmWave products as all the required hardware is self-contained inside a single chassis, enabling the source and measure capabilities to be calibrated at the instrument front panel. This full hardware integration significantly reduces the test set up complexity and improves efficiency yielding the following benefits:

- Simplest test fixturing set up
- Simple software regression set up with a single S/W interface
- · Acceleration of measurements into the range of minutes instead of hours thanks to the calibrated front panel interface

Fast Path from R&D to Manufacturing

The IQgig-5G provides a fast path from R&D to DVT to manufacturing due to the efficient re-use of test scripts and calibration algorithms with a simple and efficient tester set up.



Simplest 5G Test Fixture Connections

The IQgig-5G solution has four bi-directional source and measurement ports each with 2.4 mm connector coaxial interface which enable both horizontal and vertical antenna polarization test with a single coaxial interface. The simple interfacing enables flexibility when integrating the test system to a device test application, and easily enables scaling to efficient multi-device testing for manufacturing.

No Compromise on 5G performance

The IQgig-5G's 1.7 GHz of tester bandwidth covers the pre-5G and 3GPP standards evolution with EVM performance better than 1% for accurate device measurement.

Intuitive Graphical User Interface

The IQgig-5G intuitive graphical user interface enables the user to perform 5G waveforms generation and analysis, and tester control.



Graphical User Interface

Over-the-Air Beamforming Test Chamber

LitePoint's 5G mmWave optional test fixturing solutions include an OTA (over-the-air) test chamber for testing beamforming of the DUT's mmWave antenna structures.

5G mmWave OTA Beamforming Test Chamber

Code	Product
0100-IG5G-011	IQgig-5G Model B Test System (4-port version)
0100-IG5G-013	IQgig-5G Model B Test System (2-port version)
0300-IG5G-003	3GPP NR 5G Software License
0150-IG5G-102	mmWave Test Chamber for 5G at the 24 to 70 GHz frequency range. Includes a 2-axis DUT rotator and flexible antenna mounting system for multiple antennas and angles.
0150-IG5G-005	mmWave Test Chamber for 5G at the 24 to 70 GHz frequency range with temperature control capability. Includes a 2-axis DUT rotator and flexible antenna mounting system for multiple antennas and angles. Requires an external Thermostream unit.

