



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

Overview

The IQgig-5G is a fully-integrated, non-signaling solution for testing 5G mmWave products at both the 28 GHz and 39 GHz frequency bands. All signal generation, analysis, and RF front-end routing hardware are self-contained inside a single chassis. The IQgig-5G is license-upgradeable to support the pre-5G and 3GPP standards evolution with up to 1 GHz of tester bandwidth. The IQgig-5G solution has three bi-directional source and measurement ports each with 2.92 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, including the RF test front ends, is self-contained inside a single chassis. Both the 28 GHz and 39 GHz RF front ends are fully integrated inside the chassis thus 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

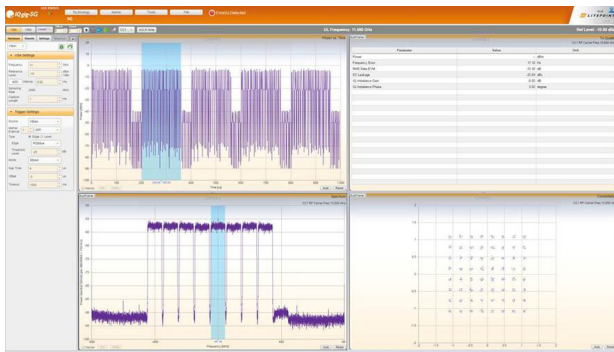
The IQgig-5G solution has three bi-directional source and measurement ports each with 2.92 mm connector coaxial interface which enable both horizontal and vertical antenna polarization test with a single coaxial interface. The user does not need to worry about adding, tracking, calibrating and maintaining different type of waveguide interfaces for different bands as the IQgig-5G coaxial interface covers all of the bands.

No Compromise on 5G performance

The IQgig-5G's 1-GHz of tester bandwidth covers the pre-5G and 3GPP standards evolution with EVM performance up to -40 dB 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.

28 GHz/39 GHz OTA Beamforming Test Chamber



Code	Product
0100-IG5G-001	IQgig-5G Model A Test System
0300-IG5G-001	Verizon 5G Technical Forum (5GTF) License
0300-IG5G-003	3GPP NR 5G Software License
0150-IG5G-102	5G Test Chamber for 28 GHz and 39 GHz bands
0150-IG5G-103	5G Test Chamber for 28 GHz and 39 GHz bands with temperature control capability (requires an external Thermostream unit)