Wideband Device Characterization

**Keysight Understands Your Challenges**

The traditional approach for wideband device characterization requires two-stage processing at the vector network analyzer (VNA) and source test stations. Two stations consume additional capital, plus ongoing operational expenses.

Systems typically require significant engineering resources and the time to design custom filters, switching, and regular system-level calibration. Having the appropriate hardware and software platforms are essential — engineering and measurement expertise is even more important for your success.

**Solving Your Test Challenges**

A revolutionary new methodology offers a single connection, single-touch measurement of key characteristics — including S-parameter, gain compression, IP3, Noise Power Ratio (NPR), Error Vector Magnitude (EVM), and Adjacent Channel Power Ratio (ACPR).

Additional advantages with a single connection, single-touch measurement will help you:

- Save on your capital expenditures, including ongoing operational maintenance and overhead expenses.
- Minimize your test time for the design and validation of custom systems.
- Reduce your time to connect/disconnect, set up system calibration, and measurement analysis.

Besides Keysight’s hardware and software solutions, we have the expertise and knowledge to help you meet your design goals.

*Requires a Keysight PNA-X N524xB with modulation distortion application Keysight S93070xB and a supported wideband source.*
Services

Our application experts can help you create flexible test scenarios in minutes, with consistent and repeatable results. Learn how to quickly:

- isolate DUT contribution to distortion and additive noise by producing a software-generated compact test signal
- create vector corrected measurements with low residual EVM and high repeatability
- get high correlation with new methods

Keysight engineers can help your team with in-depth assistance for specific applications or measurement set up to create accurate measurement results.

Let our experts guide you to:

- become familiar with Keysight hardware and software
- learn how to obtain the best measurements with optimal efficiency
- adapt existing assets for changing test needs
- correlate results from previous and enhanced methods

Our Experts

Keysight’s application experts will help you achieve your goals and keep a step ahead of your competition. Our engineers have a minimum of eight years of experience in addressing industry challenges like yours. They train to maintain a high level of expertise, driving new measurement innovations, and working with industry standards bodies. Keysight has local specialists with the expertise to help you meet your learning goals.

Services Description

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| Accelerate your measurements | New users or experienced users who need in-depth assistance with specific applications or measurement setup | • PS-XPS-100: A Keysight applications expert on-site for 1-day to help you speed up your workflow:  
  • Learn how you can quickly configure and generate test models.  
  • Verify that your spectrally compact test signals for faster channel power, spectral mask, and spurious testing DUT are correct.  
  • Understand how to calibrate and de-embed the modulation analysis domain using your setup. | • Learn how to quickly and efficiently create accurate measurement results.  
• Become familiar with your Keysight hardware and software. |

For more information, contact your local Keysight sales representative.  
To learn more, visit us at our [Keysight Consulting Services](https://www.keysight.com).