

Why Upgrade to Keysight E5081A ENA-X Vector Network Analyzer



Keysight E5071C ENA users chose their platform because they need the absolute best tool of its time for the job. But much has changed since then. Today's devices are becoming highly integrated, requiring more than S-parameter measurements such as modulated signal tests such as EVM and ACPR.

The E5081A ENA-X vector network analyzer (VNA) offers more advanced integrated noise receivers, direct receiver access, and modulated distortion software on a single test setup, enabling component characterization under high power, complex modulation schemes up to 44 GHz. These features consolidate the design verification setup necessary to conduct reliable characterization, minimizing test cycle time. Gain deeper confidence in your measurements wherever you are with proven hardware and advanced software.



High performance

- Higher frequency coverage up to 44 GHz
- Higher output power up to 17 dBm
- Up to 23 dB wider system dynamic range (ex. 146 dB)
- Extended dynamic range up to 173 dB
- 450% faster cycle time



More integrated

- Direct receiver access / configurable test set
- Low-noise receivers for accurate noise figure measurements
- Upconverter for modulation distortion analysis
- Internal second source
- Internal pulse generators and pulse modulators
- DC sources and DC inputs



Wider application coverage

- Modulation distortion analysis (ex. EVM, ACPR, etc.)
- Noise figure measurements
- Spectrum analysis
- Intermodulation distortion (IMD) measurements
- Pulsed-RF measurements

Feature Comparison

Feature	E5071C	E5081A
Minimum frequency available	✓ 9 kHz / 300 kHz	✗ 10 MHz
Maximum frequency available	✗ 4.5, 6.5, 8.5, 14, 20 GHz	✓ 20, 44 GHz
Number of test ports	✓ 2 or 4	✓ 2 or 4
Number of test ports with configurable test set	✗ 0	✓ 2
Dynamic range (at 20 GHz, 10 Hz IFBW)	✗ 96 dB	✓ 134 dB (port 1 and 2)
Power sweep range (at 20 GHz)	✗ -25 to 0 dBm	✓ -80 to 11 dBm (port 1 and 2)
IF bandwidth	✗ 10 to 1.5 MHz	✓ 1 Hz to 15 MHz
Cycle time (2-port cal, 201 points, narrow span)	✗ 9 ms (500 kHz IFBW)	✓ 2 ms (1 MHz IFW)
Display	✗ 10.4-inch touchscreen, XGA	✓ 12.1-inch touchscreen, WXGA
Low noise receivers for noise figure measurements	✗ No	✓ Yes (port 1 and 2)
Upconverter for modulation distortion analysis	✗ No	✓ Yes (port 1 and 2)
Internal pulse modulators	✗ No	✓ Yes
Internal pulse generators	✗ No	✓ Yes
Internal second source	✗ No	✓ Yes (4-port options)
Internal DC sources	✗ No	✓ Yes
Internal bias tees	✓ Yes	✗ No
Automatic fixed removal	✗ No	✓ Yes
Noise figure measurements	✗ No	✓ Yes
Modulation distortion analysis (ex. EVM or ACPR)	✗ No	✓ Yes
Spectrum analysis	✗ No	✓ Yes

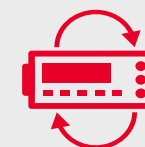
Trade in your eligible Keysight or Rohde & Schwarz vector network analyzer and receive a credit up to 45% toward your new E5081A. **Download Deal Summary**

Keysight Trade-in

VNA key trade-in benefits



Stretch your budget with great Keysight credits



Migrate to the latest technology – sooner



Enhance your competitive edge

Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at www.keysight.com.

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Published in USA, September 21, 2023, 3123-1728.EN