X-Series Measurement Applications

- Flexibility when you need it with transportable applications between X-Series signal analyzers
- Accelerate your designs with Agilent's first-to-market leadership in emerging standards
- Address ever-changing measurement needs in cellular communications, wireless connectivity, digital video, and general-purpose applications

Agilent Technologies

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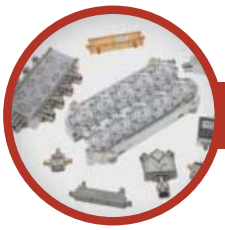

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X-Series Measurement Applications

Expand the capabilities of your X-Series signal analyzer with the industry's broadest offering of measurement applications. A shared library of more than 25 measurement applications increase the capability and functionality of the X-Series analyzers to speed your time to insight. These measurement applications provide essential measurements for specific tasks in cellular communications, wireless connectivity, digital video, and general-purpose applications.

The X-Series measurement applications and software transform X-Series signal analyzers into standards-based RF transmitter testers. They provide fast, one-button RF conformance measurements to help you design, evaluate, and manufacture your devices and equipment, and enable you to stay on the leading edge of your design and manufacturing challenges. With upgradeable CPU, memory, disk drives, and I/O ports, the X-Series signal analyzers enable you to keep your test assets current and extend instrument longevity.

A consistent measurement framework

Realize measurement integrity across your organization with consistent operation and test methods, proven algorithms, applications, and results. Your team can leverage the test system software through all phases of product development, allowing them to move at a faster pace. Whether you run them on the PXA, MXA, EXA, or CXA, you'll get the same results from the development lab into manufacturing. The only difference is the level of performance achieved by the instrument hardware, so you can choose the level of performance necessary for your application. And with consistent programming commands used across the X-Series, you minimize the effort and cost of creating test systems. Further extend your test assets by transporting applications across multiple X-Series analyzers, from EXA to PXA, across the lab, or around the globe. A common, familiar user interface means increased efficiency and productivity—when you learn how to use one X-Series analyzer, you know how to use them all.

Enhance and customize your data analysis power

With the open Windows® XP OS, you can create customized demodulation macros and run applications such as MATLAB to further analyze and visualize your wireless data, execute and test modulation schemes, and develop automated tests.

Try before you buy!

Free 14-day trials of X-Series measurement applications are available.

www.agilent.com/find/X-Series_trial

X-Series applications or 89600 VSA software?

X-Series measurement applications provide embedded and format-specific, one-button measurements for X-Series analyzers. With fast measurement speed, pass/fail testing, and simplicity of operation, these applications are ideally suited for design verification and manufacturing.

The 89600 VSA is the industry-leading measurement software for evaluating and troubleshooting signals in R&D. Supporting more than 30 measurement platforms and 75 signal standards and modulation types, including multi-channel and MIMO analysis, the PC-based 89600 VSA provides the flexibility and sophisticated measurement tools essential to find and fix signal problems anywhere in the signal block diagram—from baseband (analog or digital) to IF and RF with bandwidths from 1 Hz to 30 GHz. It's your window into what's happening inside complex wireless devices. With views of virtually every facet of a problem, the 89600 VSA tools allow you to see the "why?" behind unexpected signal interactions.

www.agilent.com/find/89600_VSA

Product Summary

Cellular communications

	Measurement application model number [1]	PXA high performance	MXA mid performance	EXA economy class	CXA low cost	MXE EMI Receiver	License type [2] (perpetual)
LTE FDD	N9080A W9080A	●	●	●	●		Fixed, Transportable
LTE TDD	N9082A W9082A	●	●	●	●		Fixed, Transportable
MSR	N9083A W9083A	●	●	●	●		Fixed, Transportable
W-CDMA/HSPA/ HSPA+	N9073A W9073A	●	●	●	●		Fixed, Transportable
GSM/EDGE/EDGE Evolution	N9071A W9071A	●	●	●	●		Fixed, Transportable
TD-SCDMA/HSPA	N9079A W9079A	●	●	●	●		Fixed, Transportable
cdma2000/cdmaOne	N9072A W9072A	●	●	●	●		Fixed, Transportable
1xEV-DO	N9076A W9076A	●	●	●	●		Fixed, Transportable
iDEN/WiDEN/ MotoTalk	N6149A	●	●	●			Fixed, Transportable

Wireless connectivity

	Measurement application model number [1]	PXA high performance	MXA mid performance	EXA economy class	CXA low cost		License type [2] (perpetual)
802.16 OFDMA	N9075A W9075A	●	●	●	●		Fixed, Transportable
Fixed WiMAX [3]	N9074A		●	●			Fixed, Transportable
WLAN 802.11a/b/g/n	N9077A W9077A	●	●	●	●		Fixed, Transportable
Bluetooth	N9081A W9081A	●	●	●	●		Fixed, Transportable

Digital video

	Measurement application model number [1]	PXA high performance	MXA mid performance	EXA economy class	CXA low cost		License type [2] (perpetual)
CMMB	N6158A W6158A	●	●	●	●		Fixed, Transportable
Digital cable TV	N6152A W6152A	●	●	●	●		Fixed, Transportable
DTMB (CTTB)	N6156A W6156A	●	●	●	●		Fixed, Transportable
DVB-T/H with T2	N6153A/ W6153A	●	●	●	●		Fixed, Transportable
ISDB-T/Tsb with Tmm	N6155A W6155A	●	●	●	●		Fixed, Transportable

Product Summary, continued

General purpose

	Measurement application model number [1]	PXA high performance	MXA mid performance	EXA economy class	CXA low cost	MXE EMI Receiver	License type [2] (perpetual)
Analog demodulation with FM stereo and RDS	N9063A W9063A	●	●	●	●	●	Fixed, Transportable
Phase noise	N9068A W9068A	●	●	●	●	●	Fixed, Transportable
Noise figure	N9069A W9069A	●	●	●	●	●	Fixed, Transportable
VXA vector signal analysis	N9064A W9064A	●	●	●	●		Fixed, Transportable
EMC	N6141A W6141A	●	●	●	●		Fixed, Transportable
MATLAB	N6171A	●	●	●	●[4]		Fixed
Pulse	N9051A	●	●	●	●[4]		Fixed
SCPI command language compatibility	N9062A W9062A	●	●	●	●	●	Fixed
Remote language compatibility	N9061A	●	●	●			Fixed

1. Application model numbers with an "N" prefix are for PXA, MXA, and EXA signal analyzers and MXE EMI receiver. Application model numbers with a "W" prefix are for the CXA signal analyzer.
2. Transportable license is not available for CXA applications.
3. Single acquisition combined measurement optimized for remote use in high-volume manufacturing environment.
4. N6171A and N9051A also run on CXA.

Built-in help

Instead of searching through hundreds of pages in a manual, just press the Help key to access a comprehensive help system inside the X-Series analyzers– any key, any menu, anytime. This includes handy SCPI programming commands.

Cellular Communications

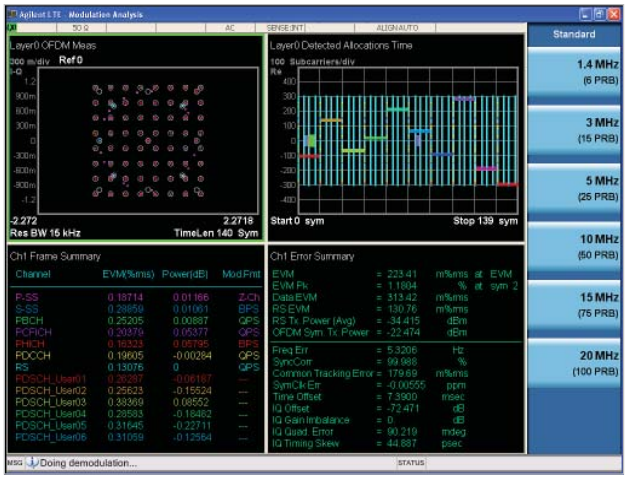
The cellular communication measurement applications cover a full range of technologies—from existing 2G/3G systems to evolving 3.5G and 4G communication systems. These measurement applications adhere to the 3GPP and 3GPP2 standards, and closely follow standards as they change, allowing you to stay on the leading edge of your design and manufacturing challenges.

LTE FDD

- Supports 3GPP Release 9 LTE standard
- Downlink and uplink analysis in a single option
- Transmitter characteristic measurements, including
  - Base station (eNB): EVM, freq error, DL RS power, RSTP, OSTP, SEM, ACLR
  - User equipment: EVM, freq error, I/Q offset, in-band emissions, SEM, ACLR
  - Multiple color coded result views: EVM vs. subcarrier, symbol, slot, resource block
- Transport layer channel decoding
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

www.agilent.com/find/N9080A

www.agilent.com/find/W9080A



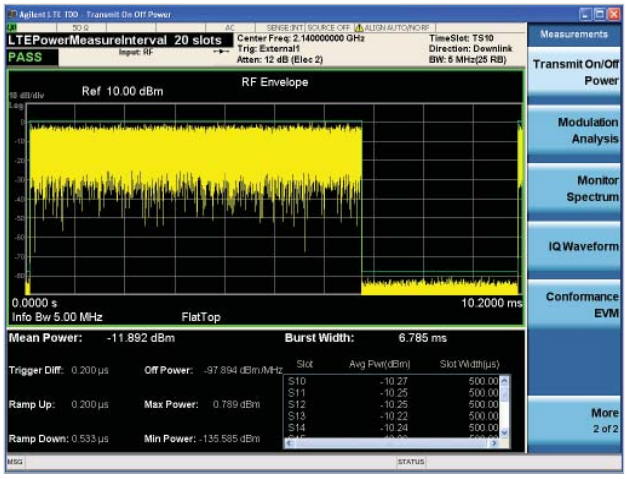
LTE FDD

LTE TDD

- Supports 3GPP Release 9 LTE standard
- Downlink and uplink analysis in a single option
- All DL/UL and special subframe length configurations
- Transmitter characteristic measurements, including
  - Base station (eNB): EVM, freq error, DL RS power, RSTP, OSTP, transmit on/off power, SEM, ACLR
  - User equipment : EVM, freq error, I/Q offset, in-band emissions, SEM, ACLR
  - Multiple color coded result views: EVM vs. subcarrier, symbol, slot, resource block
- Transport layer channel decoding
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

www.agilent.com/find/N9082A

www.agilent.com/find/W9082A



LTE TDD

Multi-Standard Radio (MSR)

- Supports 3GPP Release 9 MSR standard
- Transmitter test on any combination of LTE-FDD, W-CDMA/HSPA/HSPA+ and GSM/EDGE/EDGE Evolution signals
- One-button measurements including
  - Modulation quality: EVM, frequency error
  - Spectrum measurements: Channel power, spectrum emission mask (SEM), adjacent channel power (ACP), transmitter spurious emissions
- Automatic sequencing function to eliminate the need for wide analysis bandwidth option
- Carrier allocating algorithm with preset selection based on Test Configuration (TC) definitions in 3GPP standard

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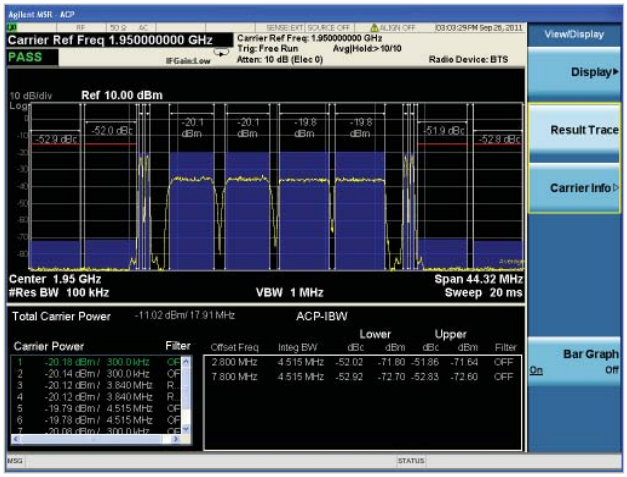
www.agilent.com/find/W9083A



Multi-Standard Radio (MSR)

W-CDMA/HSPA/HSPA+

- W-CDMA, HSPA and HSPA+ per 3GPP release 99 to 8
- Analysis of both uplink and downlink in a single option
- One-button transmitter measurements, including
  - Downlink: EVM, freq error, CPICH power, 64QAM RCDE, SEM, ACLR
  - Uplink: EVM, freq error, PkCDE, RCDE, slot power, SEM, ACLR
  - Multiple result views: constellation, code domain, numeric display
- Automatic detection of all channels and signals
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

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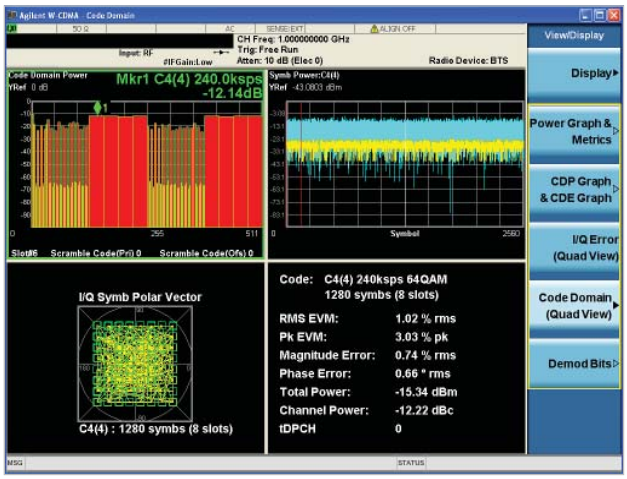
www.agilent.com/find/W9073A



W-CDMA/HSPA/HSPA+

GSM/EDGE/EDGE Evolution

- GSM, EDGE, and EDGE Evolution per 3GPP GERAN standard
- Analysis of both base and mobile stations in a single option
- One-button transmitter measurements, including
  - Base station: EVM, phase and frequency error, output RF spectrum (ORFS), power vs. time (PvT)
  - Mobile station: EVM, phase and frequency error, ORFS, PvT, TX band spur
- Multicarrier BTS (MCBTS) and adaptive QPSK (AQPSK) modulated VAMOS measurements per Rel-9 of 3GPP TS 45 standard
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

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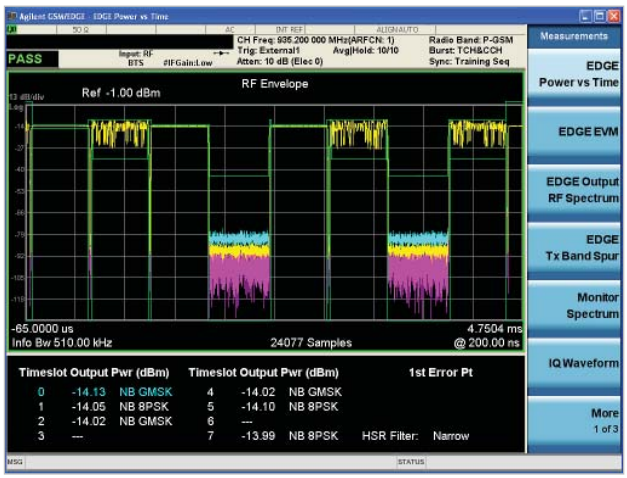
www.agilent.com/find/W9071A

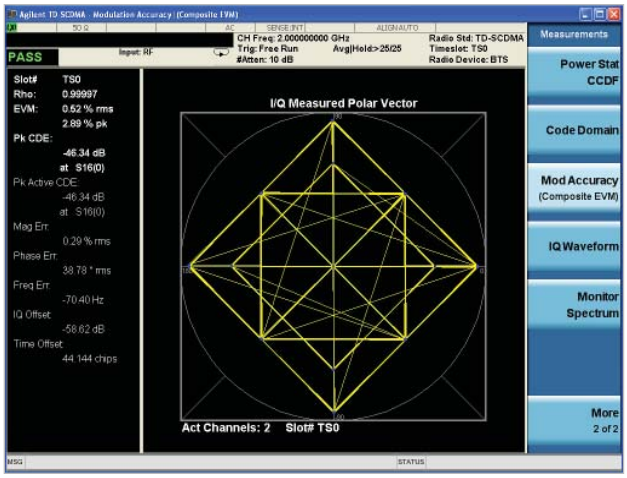


GSM/EDGE/EDGE Evolution

TD-SCDMA/HSPA

- TD-SCDMA, TD-HSDPA/HSUPA/8PSK per 3GPP release 99 to 8
- Analysis of both uplink and downlink in a single option
- One-button transmitter measurements, including
  - Downlink: EVM, frequency error, power vs. time, transmit power, code domain power, SEM, ACLR
  - Uplink: EVM, freq stability, transmit ON/OFF power, PkCDE, SEM, ACLR
  - Multiple result views: constellation diagram, code domain, numeric display, spectrum, time domain
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

www.agilent.com/find/N9079A
www.agilent.com/find/W9079A



TD-SCDMA/HSPA

cdma2000/cdmaOne

- cdmaOne and cdma2000 per 3GPP2 Release A
- Analysis of forward link and reverse link in a single option
- Forward link radio configuration (RC) 1 through 5 and reverse link RC1 through 4
- One-button Tx measurements with pass/fail per 3GPP2 standard, including
  - Modulation accuracy: composite Rho and EVM, frequency error, I/Q offset
  - Code domain power: displayed in Hadamard code or bitreverse order
  - Power and spectrum measurements: channel power, ACP, SEM, spurious emissions
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

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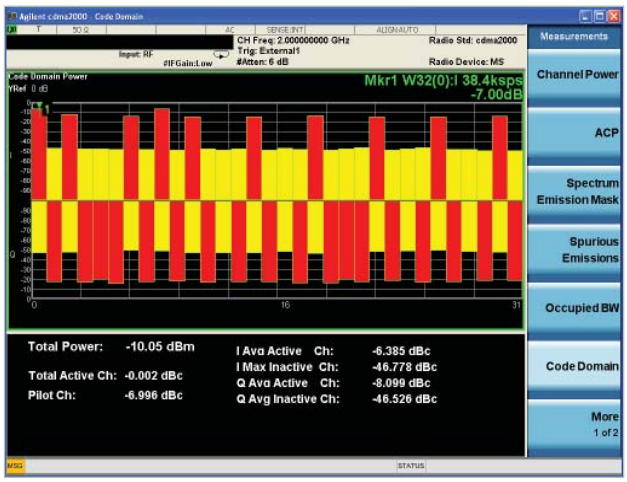
www.agilent.com/find/W9072A



cdma2000/cdmaOne

1xEV-DO

- 1xEV-DO per Rel 0, Rev A and Rev B of 3GPP2 standard
- Analysis of both forward link and reverse link in a single option
- Auto detection for data channels QPSK, 8PSK, 16QAM, and 64QAM
- One-button Tx measurements with pass/fail per 3GPP2 standard, including
  - Modulation accuracy: composite EVM and Rho, CDP, CDE, I/Q chip error
  - Power and spectrum measurements: channel power, power vs. time, ACP, SEM, spurious emissions
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

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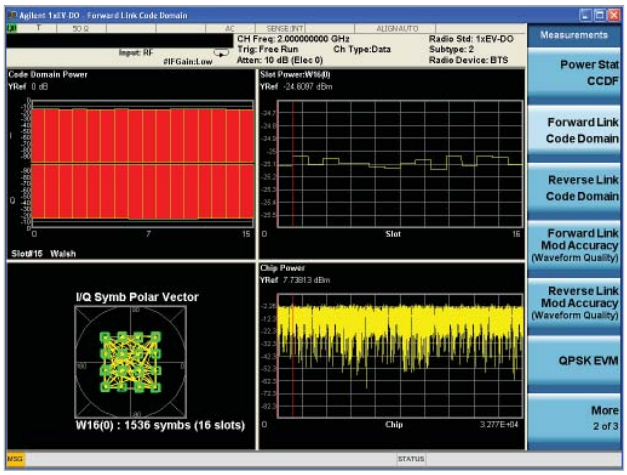

1xEV-DO

iDEN/WiDEN/MotoTalk

- iDEN, WiDEN and MotoTalk, including WiDEN multi-carrier BTS with multiple slot formats
- 4QAM/16QAM/64QAM modulation formats
- 25/50/75/100/50-outer kHz bandwidths
- Analysis of both base station and mobile station in a single option
- One-button transmitter measurements, including
  - Modulation accuracy: EVM, magnitude error, phase error, BER
  - ACP, OBW, power vs. time

www.agilent.com/find/N6149A

iDEN/WiDEN/MotoTalk

Wireless Connectivity

The wireless connectivity measurement applications cover a full range of technologies – from *Bluetooth* through 802.11 WLAN and 802.16e OFDMA Mobile WiMAX. As technology advances, X-Series measurement applications are also advancing to enable you to continue tackling increasingly complex design and manufacturing test challenges.

802.16e OFDMA (Mobile WiMAX)

- 802.16 OFDMA measurements per IEEE 802.16 2005 standard
- Analysis of both base station and mobile station in a single option
- One-button transmitter measurements, including
  - RCE (EVM), RSSI, preamble PCINR, subcarrier flatness, IQ metrics
  - Single input analysis of matrix A and pilot-based analysis of matrix B (MIMO) signals
  - SEM, ACP, channel power, spurious emissions
  - RCE in multiple levels (composite, pilot, data burst, un-modulated, and preamble)
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

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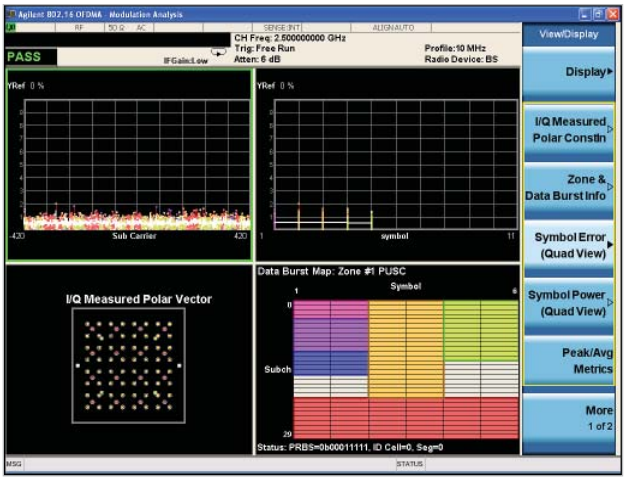
www.agilent.com/find/W9075A



802.16e OFDMA Mobile WiMAX

802.16d OFDM (Fixed WiMAX)

- IEEE standard 802.16d (802.16-2004)
- SCPI-based measurement application optimized for high-volume manufacturing
- Accelerates test speed with no measurement switching and fewer acquisitions
- Up to 36 bursts measurement results in a single acquisition (one capture)
- Measurements include transmit power, transmit output spectrum and modulation accuracy
- List power step measurement with frequency hopping (< 3.6 GHz)

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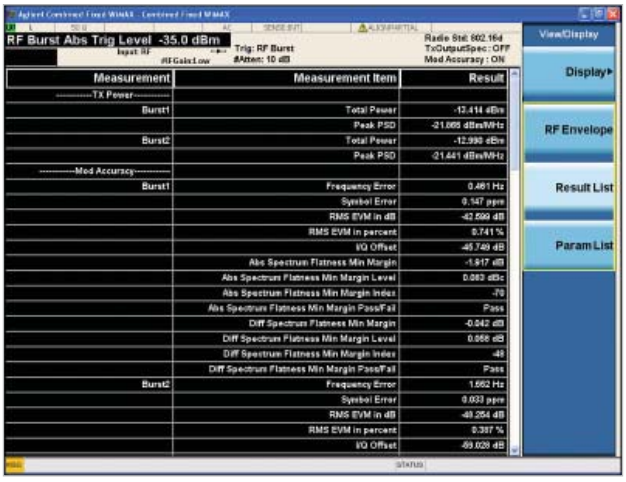

802.16d OFDM Fixed WiMAX

802.11 WLAN

- IEEE 802.11a/b/g/n standard
- One-button, standard-based measurements with pass/fail tests
  - I/Q demodulation measurements: Modulation accuracy, power vs. time, spectral flatness, power stat CCDF
  - Swept spectrum measurements: Spectrum emissions mask, spurious emissions, occupied bandwidth, channel power
- Legacy/mixed/greenfield mode for 802.11n signals
- Custom demodulation settings for analyzing 802.11j, Turbo mode, 802.11p signals

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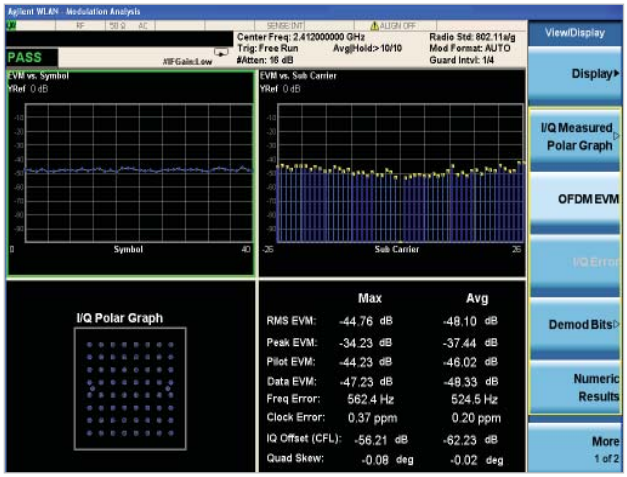

802.11 WLAN

Bluetooth

- Compliant with *Bluetooth* Core Specification Version 2.1+ EDR and Low Energy
- One-button transmitter measurements, including
  - Modulation: deviation, initial carrier frequency tolerance (ICFT), carrier frequency drift, EDR frequency stability and EDR modulation accuracy
  - Spectrum measurement: output spectrum bandwidth, adjacent channel power and EDR in-band spurious emissions
  - Multiple result views: RF envelope, demodulation waveform, RF spectrum, numeric display

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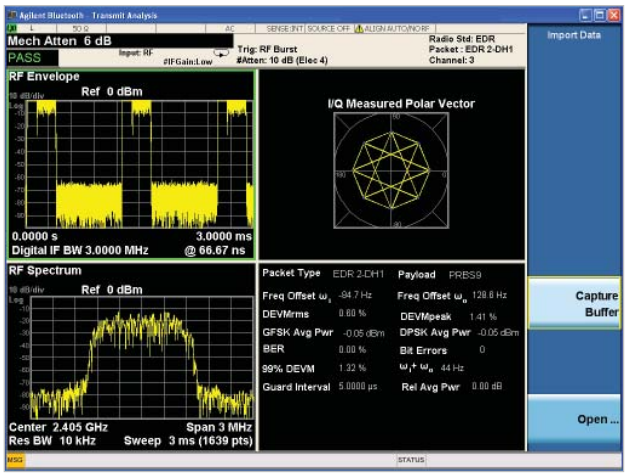
www.agilent.com/find/W9081A



Bluetooth

Digital Video

The X-Series digital video measurement applications transform X-Series signal analyzers into one-button, standards-based testers for modulators, transmitters, amplifiers, tuners, and gap-fillers/repeaters. These measurement applications cover a full range of digital video technologies—from digital cable TV to DVB-T/H/T2 to DTMB (CTTB), CMMB and ISDB-T/Tsb.

CMMB

- CMMB standard
- One-button transmitter measurements, including
  - Power measurement: channel power, shoulder attenuation, ACP, CCDF, SEM
  - Modulation accuracy: MER/EVM, frequency error, amplitude error, phase error
  - Channel frequency response, impulse response, and spectral flatness
  - Auto detection or manual settings of CMMB signal
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

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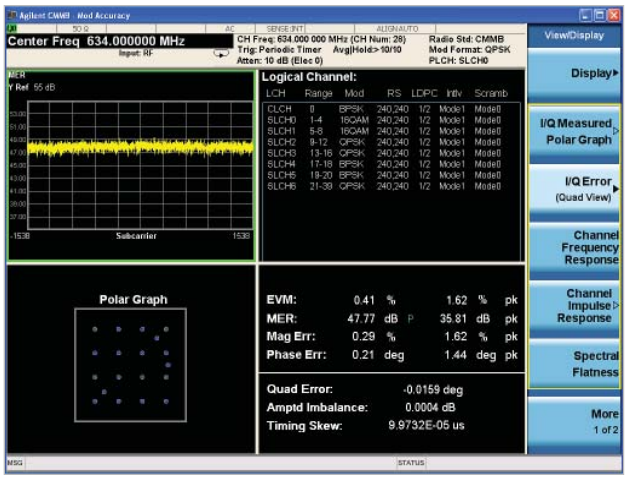
www.agilent.com/find/W6158A



CMMB

Digital cable TV

- DVB-C (J.83/A), J.83/B (DOCSIS DS) and J.83/C (ISDB-C) standards
- One-button transmitter measurements, including
  - Power measurements: channel power, ACP, CCDF, SEM
  - Modulation accuracy: MER/EVM, BER, frequency error, amplitude error, phase error
  - Channel frequency response and channel impulse response
  - Support adaptive equalizer
  - J.83/B up to 1024QAM
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

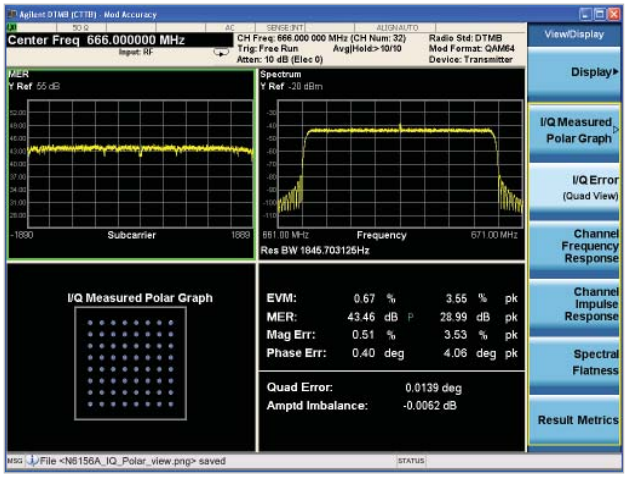
www.agilent.com/find/N6152A
www.agilent.com/find/W6152A

Digital cable TV

DTMB (CTTB)

- DTMB (CTTB) multi-carrier (C = 3780) and single-carrier (C = 1) modes
- One-button transmitter measurements, including
  - Power measurement: channel power, shoulder attenuation, ACP, CCDF, SEM
  - Modulation accuracy: MER/EVM, frequency error, amplitude error, phase error
  - Channel frequency response, impulse response, and spectral flatness
  - Auto detection or manual settings of a DTMB (CTTB) signal
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

www.agilent.com/find/N6156A
www.agilent.com/find/W6156A

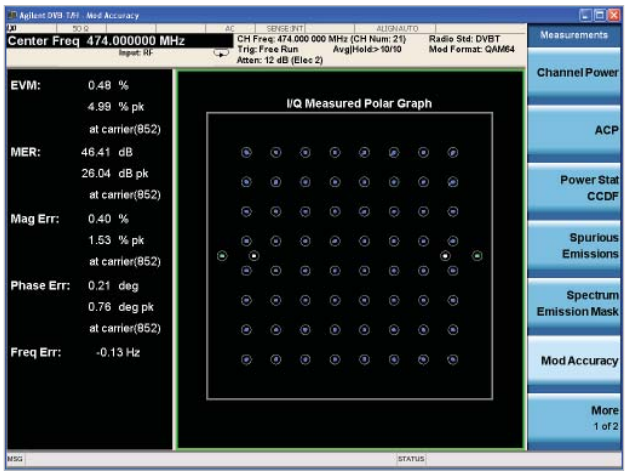


DTMB (CTTB)

DVB-T/H with T2

- DVB-T, DVB-H and DVB-T2 standards
- One-button transmitter measurements, including
  - Power measurement: channel power, shoulder attenuation, ACP, CCDF, SEM
  - Modulation accuracy: TPS decoding, MER/EVM, BER (for DVB-T/H), frequency error, amplitude error, phase error
  - Channel frequency response and channel impulse response
  - Auto detection or manual settings of DVB-T, DVB-H, or DVB-T2 signals
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

www.agilent.com/find/N6153A
www.agilent.com/find/W6153A

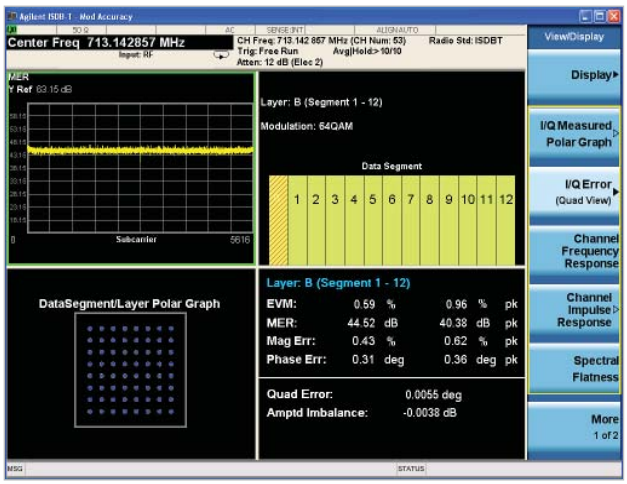


DVB-T/H with T2

ISDB-T/Tsb with Tmm

- ISDB-T, ISDB-Tb, and ISDB-Tsb and ISDB-Tmm standards
- One-button transmitter measurements, including
  - Power measurement: channel power, shoulder attenuation, ACP, CCDF, SEM
  - Modulation accuracy: TMCC decoding, MER/EVM, frequency error, amplitude error, phase error
  - Channel frequency response, channel impulse response, and spectral flatness
- Auto detection or manual settings of ISDB-T, ISDB-Tb, or ISDB-Tsb signals
- Auto-detect and show ISDB-Tmm configuration by super segment
- Show AC (auxiliary channel) decoded bits in AC decoding results view
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

www.agilent.com/find/N6155A
www.agilent.com/find/W6155A



ISDB-T

General Purpose

The X-Series signal analyzers offer a variety of general purpose measurement applications for use in the development and manufacturing of RF and microwave transceivers and the components that comprise them. The general purpose measurement applications cover a full range of solutions from phase noise measurements for oscillator tests, to noise figure test of amplifiers, to digital demodulation on standards-based or propriety formats using the flexible digital modulation measurement application supporting more than 30 demodulators. X-Series signal analyzers support MATLAB, allowing you to create custom measurement programs for analyzing evolving signals and standards with your X-Series analyzers.

Analog demodulation

- Demodulates AM, FM, or PM signals
- Demodulates FM stereo/RDS signals
- Display modulation metrics such as AM depth, FM deviation, PM deviation, THD, and SINAD
- Audio filters
- Play the modulating signal over a speaker (tune & listen)
- Multiple measurement views:
  - View RF spectrum, demodulated waveform, AF spectrum, and demodulation metrics tables at the same time
  - View MPX, mono, stereo, left, right
  - View RDS/RBDS decoding results

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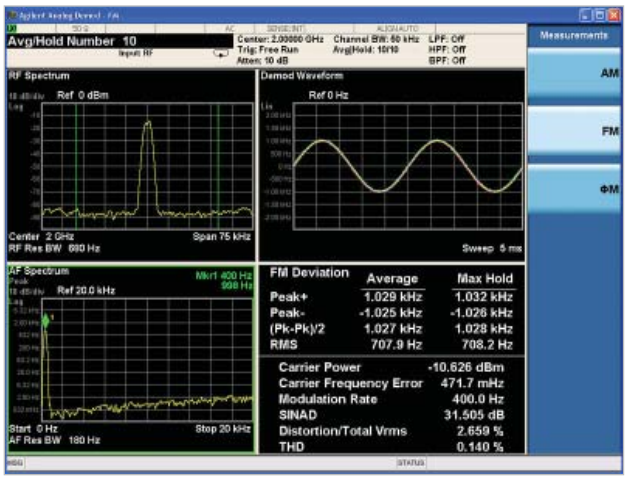

Analog demodulation

Phase noise

- Log plot: view entire phase noise behavior in frequency domain across a wide range of offset frequencies
- Spot frequency: monitor phase noise fluctuation vs. time at a user-specified single offset frequency
- Suite of advanced marker functions
- Integrated noise measurements, including: RMS phase deviation, RMS phase jitter, residual FM
- Code compatible with ESA and PSA spectrum analyzer phase noise applications

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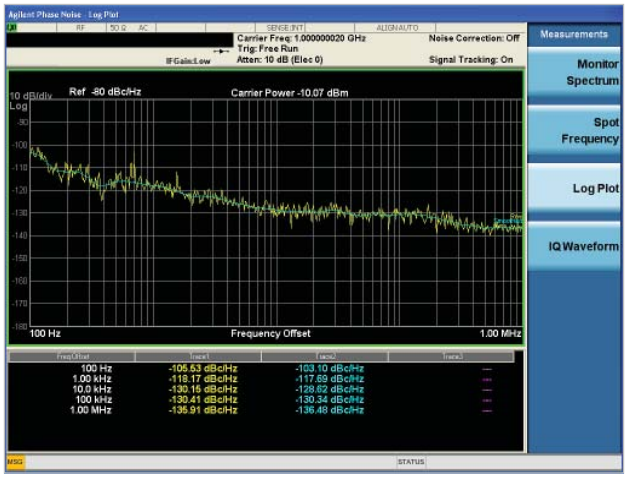

Phase noise

Noise figure

- Noise figure, noise factor, gain, Y-factor, effective temperature, hot/cold power density measurements up to 26.5 GHz (hardware dependent)
- Supports Agilent SNS and 346 Series noise sources
- Internal uncertainty calculator
- Saved calibration data during power cycle
- User-defined sweep time to allow variable point averaging
- Code compatible with ESA and PSA spectrum analyzers and NFA noise figure analyzers

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Noise figure

VXA vector signal analysis

- Vector analysis: FFT-based spectrum and time domain
- Analog demodulation: AM, FM, PM
- Digital demodulation
  - > 30 modulation formats, including 2 to 16 FSK, QPSK, 16 to 1024QAM
  - > 25 standards presets, including cellular, wireless networking, digital video
  - 7 filters and a user-defined filter
- WLAN modulation analysis
  - 802.11a/g OFDM and turbo mode
  - 802.11g DSSS-OFDM
  - 802.11p DSRC, 802.11j 10 MHz
  - HIPERLAN/2
- Analog baseband analysis with PXA or MXA Option BBA (BBIQ inputs)

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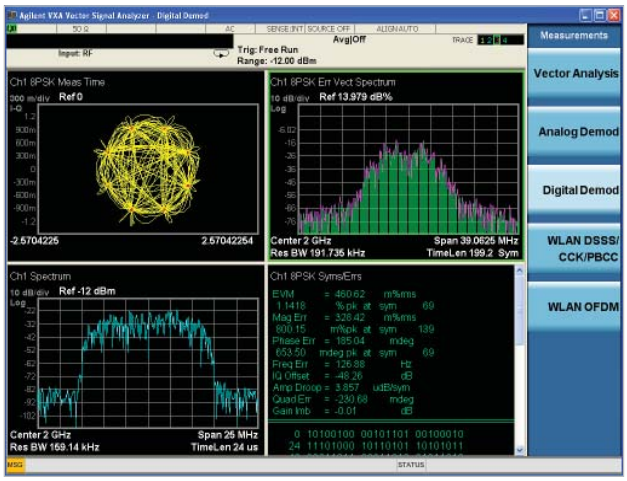

VXA vector signal analysis

EMC

- Measure designs to the latest CISPR 16-1-1 or MIL-STD requirements
- Perform pre-compliance conducted and radiated emissions tests
- Multiple detectors: peak, quasi-peak, EMI average, and RMS average
- Easily identify out-of-limit device emissions and maximize signals to compare against regulatory requirements
  - Signal list, frequency scan, and active detector meters are displayed on a single screen
- View signals over time using the strip chart
- Tune and listen to signals in the frequency scan list

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EMC

MATLAB software

- Install and execute MATLAB directly on the instrument or remotely using GPIB or LAN connectivity
- Purchase directly from Agilent in conjunction with an X-Series or PSA analyzer
- MATLAB instrument driver tested and supported by Agilent
- Key applications
  - Create, modify, and execute your own X-Series applications
  - Automate measurements
  - Execute and test custom modulation schemes
  - Analyze, filter, and visualize data
  - Generate arbitrary waveforms
  - Build test systems

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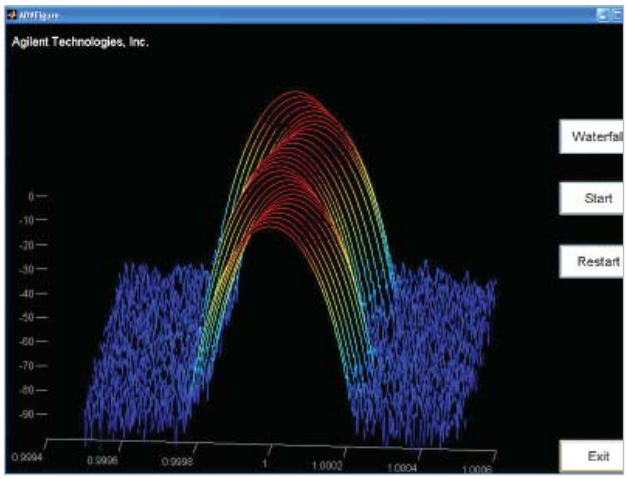

MATLAB software

Pulse

- Analyze the parameters of up to 1000 continuous pulses
- Pulse analysis measurements include
  - Period, width, PRI/PRF, droop, overshoot, rise/fall time, average power, peak power, PDF, CDF, CCDF
  - Zoom feature for closer analysis of signal
  - Markers for absolute and relative measurements
  - Phase and frequency measurements such as pulse-to-pulse phase, chirp, and pulse compression ratio
  - Extended analysis and statistics
- Also works with PSA spectrum analyzers and Infiniium oscilloscopes
- Runs inside the X-Series analyzers, Infiniium Series oscilloscopes or on an external PC

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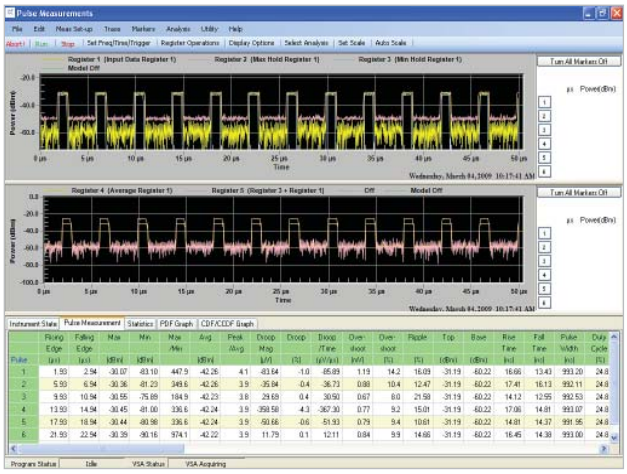

Pulse

SCPI command language compatibility

- Emulates R&S FSP, FSU, and FSE spectrum analyzers in remotely controlled, automated test environments
- Supports over 278 SCPI and 16 IEEE 488.2 standard SCPI commands
- Covers general-purpose spectrum analyzer settings, including
  - Frequency, span, RBW, VBW, detectors, average type
  - Markers: normal, delta, marker noise, band power, and power density
  - Limit line and limit check functions
  - Channel power, ACP, CCDF
  - File saving and screen image
  - Free of charge when ordered with a new instrument; nominal charge as an upgrade to existing instruments

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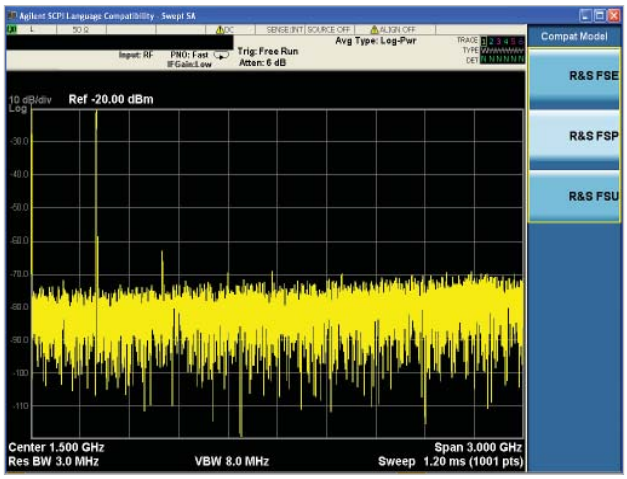

SCPI command language compatibility

Remote language compatibility

- Emulates the HP/Agilent 856xE/EC and 8566/68 remote programming language
- Supports the most frequently used 856xE/EC and 8566/68 commands
- Access from the front panel or via remote user interface
- Logs command errors
- Free of charge when ordered with a new instrument; nominal charge as an upgrade to existing instruments

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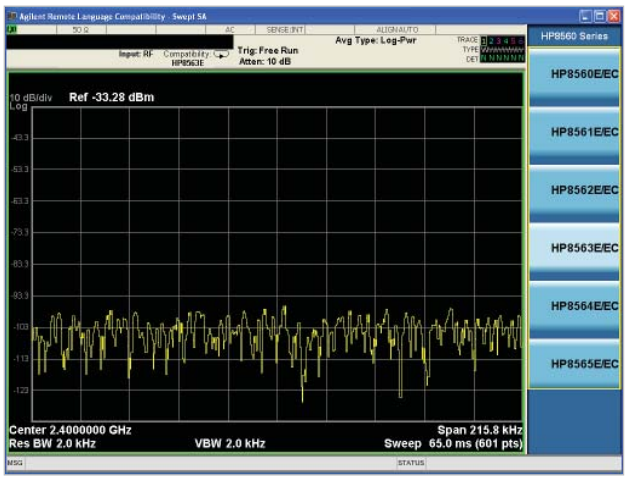

Remote language compatibility

Flexible Software Licensing

Choose from two license types:

- ***Fixed, perpetual license:***
  Fixed licenses are traditional licenses that fix an application to a specific instrument. Once installed, the license cannot be moved to another instrument and it becomes part of the test asset.

- ***Transportable, perpetual license:*** Transportable licenses allow an application to be moved between instruments, providing you the flexibility to manage test and measurement capabilities in your organization, across the lab, or around the globe, as your business needs evolve. A transportable license costs only 30% more than the equivalent fixed license and is available for most X-Series applications. Please refer to the Product Summary for specific availability.

Benefits of transportable licenses

- Maximize the flexibility of your test assets by sharing measurement applications between PXA, MXA or EXA signal analyzers
- Save money and increase your return on test asset investments as project needs change by purchasing fewer applications per instrument
- Save time by transporting the applications to the test bench nearest you, instead of physically moving the test equipment or DUT
- Use the same application at different X-Series performance levels in different time zones, departments, and/or test benches
- Keep up with your changing project needs by transporting an application up to 10 times per month; use a simple Agilent server connection with an instrument or a PC to check-in/out applications

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You Can Upgrade!

Options can be added after your initial purchase.

All of our X-Series application options are license-key upgradeable.

Try Before You Buy!

Free 14-day trials of X-Series measurement applications provide unrestricted use of each application's features and functionality on your X-Series analyzer. Redeem a trial license on-line today:

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Agilent Advantage Services is committed to your success throughout your equipment's lifetime. To keep you competitive, we continually invest in tools and processes that speed up calibration and repair and reduce your cost of ownership. You can also use Infoline Web Services to manage equipment and services more effectively. By sharing our measurement and service expertise, we help you create the products that change our world.

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