

SUMMER-FALL 2010

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# Agilent Distribution Products Catalog



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*All prices USD. All pricing and technical data subject to change.*

## What's New

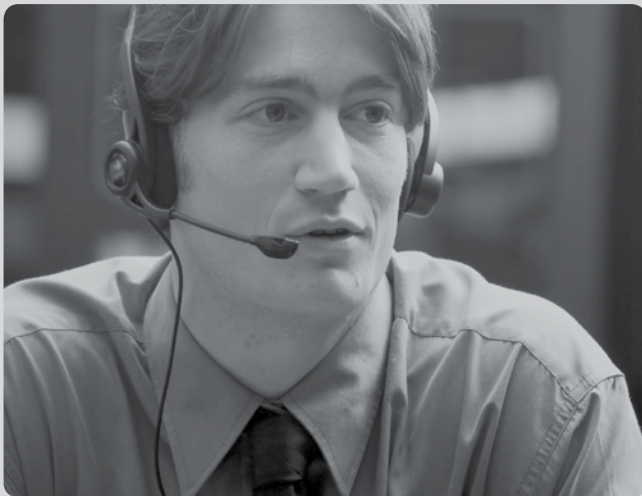
**"Orange Series" safety first with CAT IV 600 V and CAT III 1000 V safety rating. See pages 6-8.**

**Improved operation and analysis in the 7000B Series Infiniivision oscilloscope. See page 17.**



## Agilent & Our Distributor Network

**Right Instrument. Right Expertise.  
Delivered Right Now.**



Agilent and our network of Agilent Authorized Distributors have teamed up to provide fast, easy access to the world's largest selection of off-the-shelf T&M instruments. It's the best of both worlds: Agilent's measurement expertise and product breadth combined with speed, convenience and same-day shipping from our distribution partners. It's never been easier to get the right instrument in the right hands, right away.

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**Agilent Technologies**

*Authorized Distributor*

## Agilent 34980A multifunction data acquisition switch/measure unit

### A compact platform at a compact price

This 8-slot mainframe includes a choice of 21 optional plug-in modules for custom configurations. As a one-box solution it is ideal for medium to high-density switch/measure applications in design verification, automated test and data acquisition applications.

- High-performance switching—up to 560 2-wire multiplexer channels or 4092 matrix cross-points in one mainframe
- Optional built-in 6½ digit DMM—make 11 measurements with more than 3000 readings/sec
- Built-in LAN, USB 2.0, and GPIB
- BenchLink Data Logger software (34826A) for high-speed data logging with no programming



LXI

Advanced  
data logging  
without spending  
hours  
programming

For a convenient way to collect and analyze your data, expand the capabilities of Agilent 34980A data acquisition/switch units with **Agilent BenchLink 34832A Data Logger Pro software**



### 21 modules to choose from:

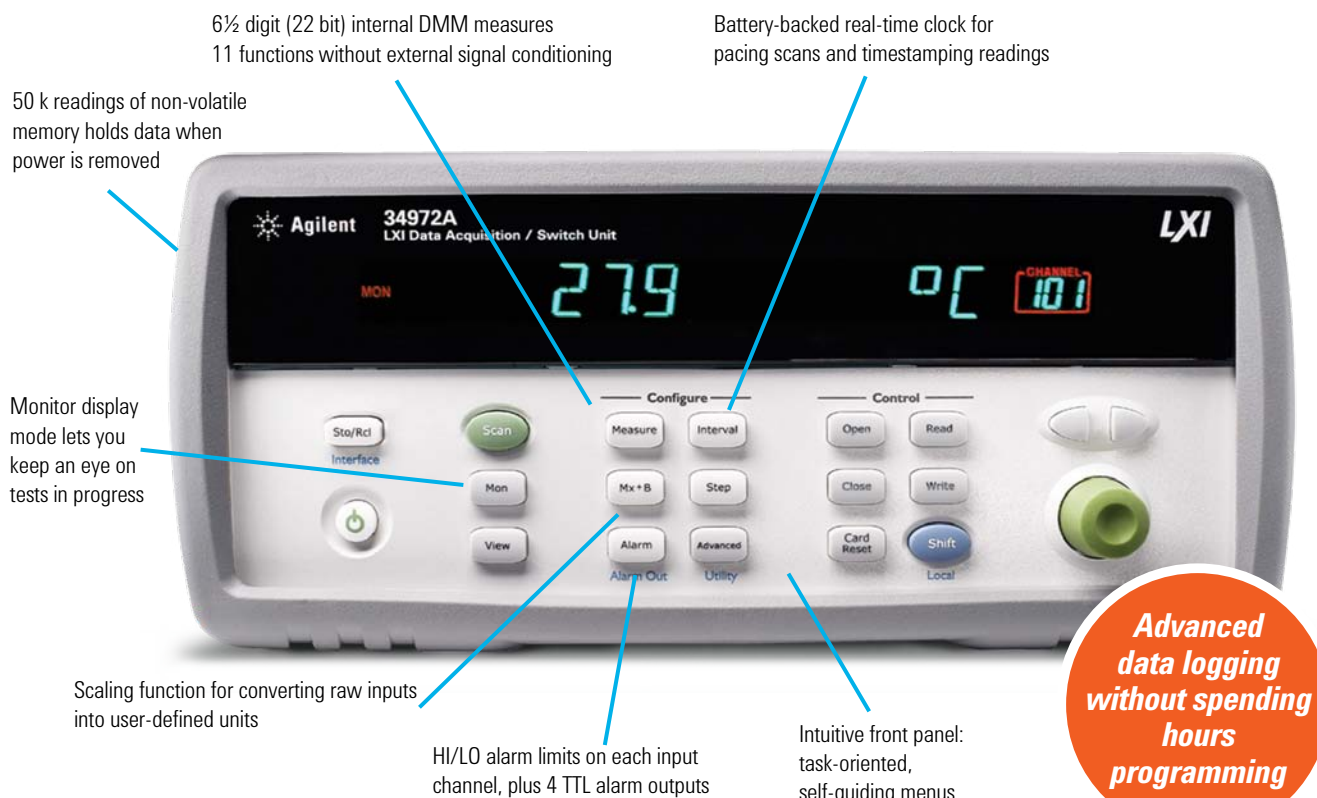
Model	Description	Key specifications	Price from (US)
34921A-25A	Multiplexers	Up to 300 V/1 A	\$851
34931A-33A	Matrix switches	Up to 128 crosspoints	\$993
34934A	High-density switch	512-crosspoint reed matrix	\$5,109
34939A	High-density switch	64-channel Form A channels up to 10 W	\$1,197
34937A/38A	GP switches	1 A and 5 A	\$957
34941A/42A	RF switches	50 to 75 Ohms	\$1,611
34945A	µW switch/attenuation driver	Drive 64 coils	\$1,202
34946A/47A	µW switches	SPDT switch to 20 GHz, 1- or 2-wire configurations	\$818
34950A-34959A	System control	Choose from D/A, DIO, Counter & breadboard	\$504



## Agilent 34970A/72A data acquisition/switch unit

*More power and flexibility than  
you ever imagined you could afford*

- Get the flexibility you need with a 3-slot mainframe and your choice of 8 plug in modules
- Simplify your data gathering with the included BenchLink Data Logger software—expand the capabilities even further with BenchLink Data Logger Pro
- Your choice of interfaces for programming and automated test



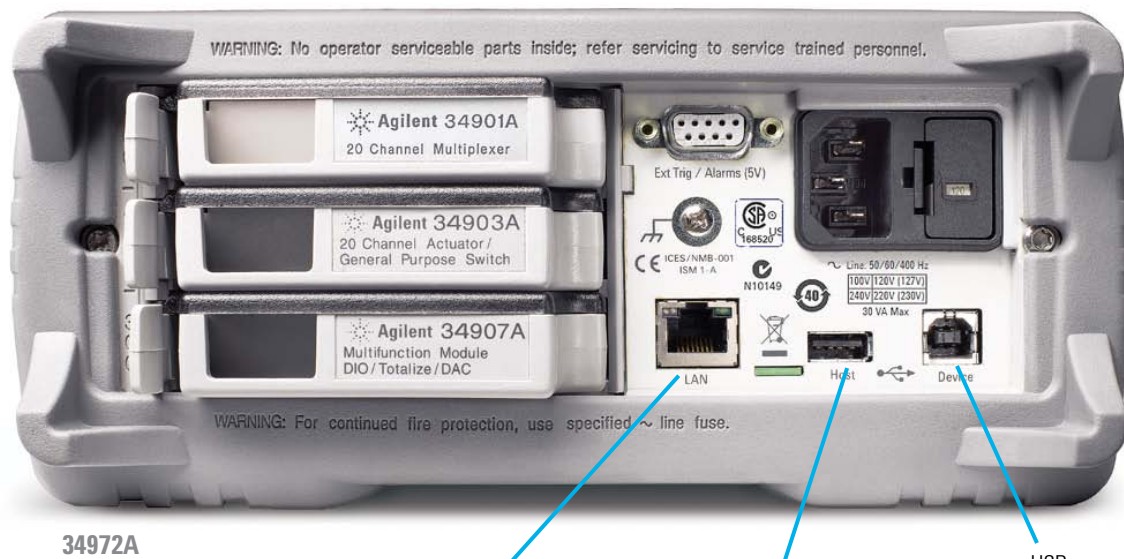
### Two mainframes to choose from:

	34970	34972
Supports 8 plug-in modules	X	X
LabView drivers	X	X
IVI-C, IVI-COM drivers	X	X
BenchLink Data Logger	X	X
Optional BenchLink Data Logger Pro	X	X
Graphical Web interface		X
Gigabit LAN		X
USB 2.0		X
USB memory port		X
GPIB	X	
RS-232	X	
Price from (US)	\$1,597	\$1,845

For a convenient way to collect and analyze your data, expand the capabilities of Agilent 34970A/34972A data acquisition/switch units with **Agilent BenchLink 34830A Data Logger Pro software**



**New 34972A includes LAN,  
USB and Web interface capabilities**



**34972A**

Built-in LAN and USB for  
instant connection to a PC

USB memory port  
to log/transfer data  
to a USB flash drive

#### Eight modules to choose from:

	34901A	34902A	34903A	34904A	34905A	34906A	34907A	34908A
<b>Description</b>	20-channel multiplexer	16-channel multiplexer	20-channel actuator/ GP switch	4x8 matrix	Dual 4-channel RF mux, 50 $\Omega$	Dual 4-channel RF mux, 75 $\Omega$	Multifunction module	40-channel single-ended
<b>Type</b>	2-wire armature (4-wire selectable)	2-wire reed (4-wire selectable)	SPDT/ Form C	2-wire armature	Common low (unterminated)	Common low (unterminated)	Two 8-bit digital I/O ports 26-bit, 100-kHz event counter	Two 16-bit analog outputs 40-channel single-ended multiplexer
<b>Speed (ch/sec)</b>	60	250	120	120	60	60	N/A	60
<b>Max voltage</b>	300 V	300 V	300 V	300 V	42 V	42 V	42 V	300 V
<b>Max current</b>	1 A	50 mA	1 A	1 A	0.7 A	0.7 A	400 mA	1 A
<b>Price from (US)</b>	<b>\$481</b>	<b>\$585</b>	<b>\$414</b>	<b>\$519</b>	<b>\$758</b>	<b>\$758</b>	<b>\$388</b>	<b>\$495</b>

## Agilent U1210 Series handheld clamp meters

### Handle big currents—more safely

Unlike most clamp meters, the U1210 Series includes DMM capabilities—resistance, capacitance, frequency and temperature—to simplify troubleshooting during installation and maintenance.

- Large 52 mm (2 in) clamp opening
- CAT IV 600 V and CAT III 1000 V safety rating
- Measures as low as 0.01 mA to 0.01 A



Measurements	U1211A	U1212A	U1213A
<b>DCV</b>	0.1 V - 1000 V (0.5%)	0.1 V - 1000 V (0.5%)	1 mV - 1000 V (0.2%)
<b>ACV</b>	0.1 V - 1000 V (1.0%)	0.1 V - 1000 V (1.0%)	1 mV - 1000 V (1.0%)
<b>DCA</b>		0.01 A - 1000 A (1.5%)	0.01 A - 1000 A (1.5%)
<b>ACA</b>	0.01 A - 1000 A (1.0%)	0.01 A - 1000 A (2.0%)	0.01 A - 1000 A (2.0%)
<b>Resistance</b>	0.1 $\Omega$ - 4 k $\Omega$ (0.5%)	0.1 $\Omega$ - 4 k $\Omega$ (0.5%)	0.1 $\Omega$ - 40 M $\Omega$ (0.3%)
<b>Capacitance</b>	0.1 $\mu$ F - 4000 $\mu$ F (2.0%)	0.1 $\mu$ F - 4000 $\mu$ F (2.0%)	1 nF - 4000 $\mu$ F (1.0%)
<b>Diode</b>	X	X	X
<b>K-type -200 to 1372 °C</b>		X	X
<b>Frequency</b>	X	X	X
<b>Duty cycle</b>			X
<b>Price from (US)</b>	<b>\$250</b>	<b>\$330</b>	<b>\$350</b>



U1213A

## Agilent U1401B handheld calibrator

### Carry two tools in one and calibrate while you measure

Now you can travel light, whether you're doing calibration for validation, troubleshooting, or service and maintenance.

- 50,000-count resolution on dual display
- Simultaneous source and measure capabilities
- Bipolar voltage and current, square-wave, auto scan and ramp outputs
- Full-span DMM measurement and recording functions
- Built-in charging capability
- Includes protective holster, a rechargeable battery pack, power adapter and cord, calibrator/meter test lead kit, mA simulation test lead, certificate of calibration and quick start guide

**Price from (US) 701**



U1401B

## Agilent U1600 Series handheld oscilloscopes

### Get maximum versatility for troubleshooting in the factory or field

Use this full-featured, dual-channel scope with built-in DMM and data logger capability for high-performance troubleshooting on the go.

- See and differentiate signals easily with 11.43 cm (4½ in) color LCD display
- Capture glitches easily with flexible triggering up to 200 MSa/s maximum sampling rate
- Deep memory to uncover subtle details and higher resolution zoom-ins, with up to 125,000 points recording length
- Perform quick waveform analysis with waveform math
- Document results easily using the standard USB 2.0 interface for PC connectivity or optional USB host capability for quick saving to a USB flash drive

	U1602B	U1604B
<b>Bandwidth</b>	20 MHz	40 MHz
<b>Maximum sample rate</b>	200 MSa/s interleaved (both channels), 100 MSa/s each channel (50 s/div to 250 ns/div)	
<b>Recording length</b>	Maximum 125,000 points	
<b>Advanced features</b>	N/A	FFT and dual waveform math capability
<b>Price from (US)</b>	<b>\$1,358</b>	<b>\$1,695</b>



U1604B

## Agilent U1700 Series handheld capacitance and LCR meters

### Quick, convenient LCR checks

Equip everyone on your team for passive-component testing—on the bench or on the go.

**U1701B handheld capacitance meter** features a dual display with 11,000 counts resolution and a wide measurement range from 0.1 pF to 199.99 mF. Sort capacitors easily by utilizing the visible and audible tolerance mode.

**U1731B/32B handheld LCR meters** enable simple operation with one-button access to make inductance, capacitance and resistance measurements.

	U1701B	U1731B	U1732B
<b>Resolution</b>	11,000	20,000	20,000
<b>Capacitance range</b>	0.1 pF to 199.99 mF	0.1 pF to 19.99 mF	0.01 pF to 19.99 mF
<b>Inductance range</b>	N/A	0.1 µH to 999.9 H	0.1 µH to 999.9 H
<b>Resistance range</b>	N/A	0.001 Ω to 9.999 MΩ	0.001 Ω to 9.999 MΩ
<b>Standard functions</b>	Hold and Min/Max/Average recordings, relative mode, and dual display		
<b>Advanced functions</b>	Backlight Compare mode	Dissipation and quality factor measurements Test frequencies of 120 Hz/1 kHz	Backlight Dissipation and quality factor measurements Test frequencies of 100 Hz/120 Hz/1 kHz/10 kHz
<b>Tolerance modes</b>	1%, 5%, 10%, 20%	1%, 5%, 10%	1%, 5%, 10%, 20%
<b>Price from (US)</b>	<b>\$158</b>	<b>\$289</b>	<b>\$347</b>



U1732B



## Agilent handheld DMMs

### Check more, fix more, spend less

These affordable, rugged handhelds put precision measurements in the palm of your hand.

**U1240 Series handheld DMMs** feature true RMS readings on a 10,000-count display. Adjustable backlighting helps you do your job even in low lighting conditions, while prolonging battery life.

**U1250 Series handheld DMMs** combine the functions of a full-featured DMM and frequency counter, so you can make temperature measurements and output square waves with one unit. Accessories are included at no extra cost.

Broad range of measurement functions, including temperature and capacitance

SHIFT key and one-stop function keys for easy access

20 MHz frequency counter

Built-in battery charging for optimum capacity



World's first handheld DMM Organic LED display with approximately 160° viewing angle and high contrast ratio of 2000:1 for crystal-clear viewing

Data logging to internal or external memory

Programmable square-wave generator for simulation of digital circuits

CAT III 1000 V  
CAT IV 600 V  
overvoltage protection for assurance of your safety while you go about your tasks

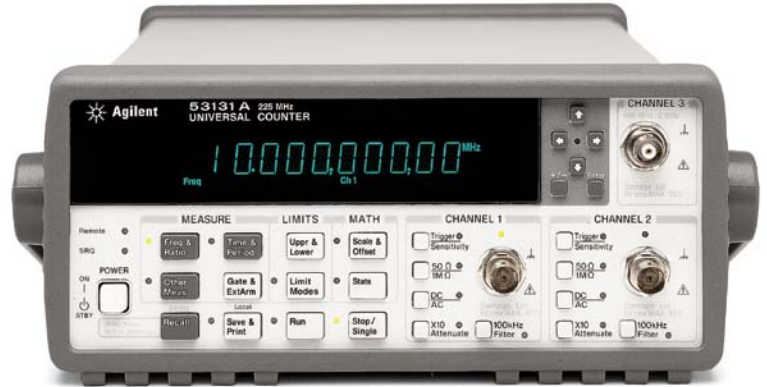
	U1241B	U1242B	U1251B	U1252B	U1253B
Digits	4	4	4½	4½	4½
Display counts	10,000		50,000		
Standard functions	Voltage, current, resistance, frequency, continuity with beeper, diode test, min/max, hold, capacitance, temperature, % scale of 4–20 mA				
			Peak, dB/dBm, data logging to PC and internal memory		
Advanced functions	Switch counter	Switch counter, harmonic ratio, dual and differential temperature measurements		20 MHz frequency counter, programmable square wave generator	Organic LED display, 20 MHz frequency counter, programmable square wave generator
Accuracy	0.09% basic DC voltage accuracy		Up to 0.025% basic DC voltage accuracy		
Price from (US)	\$201	\$221	\$382	\$410	\$450



## Agilent 53131A universal frequency counter

**Fast, precise measurements and a host of high-end features at an affordable price**

- Make accurate measurements quickly and easily with the intuitive interface and one-button access to frequently used functions
- Real-time digital signal processing for higher resolution measurements in a fraction of the time it takes other counters
- Automated limit tests and one-button measurement setups for fast, easy operation
- Choose an optional third channel for measurements up to 12.4 GHz



## Agilent 53132A universal frequency counter

For applications requiring higher resolution than the 53131A.

- Up to 12-digits/sec frequency resolution and 150-ps time interval resolution
- Advanced arming mode for time interval measurements



## Agilent 53181A RF frequency counter

An easy-to-use counter that's optimized for RF applications.

- Digit-blanking function lets you easily eliminate unnecessary digits when you want to read measurements quickly
- For higher-frequency measurements, choose an optional second channel that provides measurements up to 1.5, 3, 5, or 12.4 GHz

Model	53131A	53132A	53181A
Type	2 Channel* Universal; optional 3rd Channel		1 Channel RF; optional 2nd Channel
Measurements	Frequency, frequency ratio, time interval, period, rise/fall time, positive/negative pulse width, duty cycle, phase, totalize, peak voltage, time interval average, time interval delay		Frequency, frequency ratio (with optional Channel 2), period, peak voltage
Analysis	Automatic limit testing, math (scale and offset), statistics (minimum, maximum, mean, standard deviation)		
Frequency range (optional)	DC to 225 MHz (3, 5 or 12.4 GHz)	DC to 225 MHz (3, 5 or 12.4 GHz)	DC to 225 MHz (1.5, 3, 5 or 12.4 GHz)
Resolution (frequency, time interval)	10 digits/s, 500 ps	12 digits/s, 150 ps	10 digits/s, RF
Connectivity	Standard IntuiLink software, GPIB, and RS-232 (print only)		
Price from (US)	\$2,233	\$3,464	\$1,945

\* Channel 2 can only be used to make frequency, period, ratio, and voltage measurements—measurements on Channel 1 and Channel 2 are made sequentially.

## Agilent DC power supplies

### Power to advance your test

Whether your device needs a quick check or a detailed assessment, ensure great measurements with the precision, reliability and flexibility of Agilent DC power supplies.

- Test confidently with clean, precise DC power that's fully specified and guaranteed
- Safeguard loads from potential harm with robust output protection and fault detection capabilities



**Over 200 models of power supplies—30 W up to 6.6 kW.**  
Here are a few of the most popular models:

Power	U8000 Series	E3600 Series	N5700 Series	N8700 Series	N6700 Series	6600 Series	6030 Series
0-50 W		X			X	X	
51-175 W	X	X			X	X	
176-1200 W		X			X	X	X
200-2000 W			X			X	X
1201-6600 W			X	X		X	
Price from (US)	\$307	\$451	\$2,497	\$4,699	\$1,126 /output	\$2,244	\$4,404

## Agilent U8000 Series DC power supplies

### Get extra features and functions without spending more

U8000 Series 90- to 150-W single-output, non-programmable DC power supplies include extra features—typically found only in more-expensive supplies.

- Low output noise (as low as 1 mVrms) minimizes interference into your device-under-test (DUT)
- Excellent 0.01% load and line regulation for steady output power levels
- Fast load transient response time (50  $\mu$ s) reduces test time and manufacturing cost
- Fully integrated over-voltage and over-current protection to prevent damage to your DUT



	Voltage	Current	Power	Price from (US)
U8001A	30 V	3 A	90 W	\$316
U8002A	30 V	5 A	150 W	\$396



## Agilent E3600 Series DC power supplies

### Reliable power, repeatable results

For environments that need to watch test costs as closely as they watch test results.

- Extremely low output noise—as low as 1 mVp-p/0.2 mVrms
- Tight 0.01% load and line regulation for steady output power levels
- Fast load transient response time (<50  $\mu$ s)
- Choice of models from 30 to 200 W output power
- Convenient front-panel, GPIB, and RS-232 programming

### E3610A-17A/20A/30A manual DC power supplies

- Up to 120 V and 6 A—just the power you need
- 30 to 60 W—single, dual and triple outputs
- 10-turn pots—make fine adjustments easily

### E3631A-34A programmable DC power supplies

- System-level performance without the high price
- 80 to 200 W—single or triple output for more power options
- Rotary knob and self-guiding keypads—precise adjustments for output resolution

#### E3610A-17A/20A/30A

	GPIB, RS-232	Output	Range	Voltage	Current	Power	Price from (US)
<b>E3610A</b>	N	1	2	8 V 15 V	3 A 2 A	30 W	<b>\$451</b>
<b>E3611A</b>	N	1	2	20 V 35 V	1.5 A 0.85 A	30 W	<b>\$451</b>
<b>E3612A</b>	N	1	2	60 V 120 V	0.5 A 0.25 A	30 W	<b>\$451</b>
<b>E3614A</b>	N	1	1	8 V	6 A	48 W	<b>\$707</b>
<b>E3615A</b>	N	1	1	20 V	3 A	60 W	<b>\$707</b>
<b>E3616A</b>	N	1	1	35 V	1.7 A	60 W	<b>\$707</b>
<b>E3617A</b>	N	1	1	60 V	1 A	60 W	<b>\$707</b>
<b>E3620A</b>	N	2	1	25 V	1 A	50 W	<b>\$615</b>
<b>E3630A</b>	N	3	1	6 V 20 V -20 V	2.5 A 0.5 A 0.5 A	35 W	<b>\$615</b>

#### E3631A-34A

	GPIB, RS-232	Output	Range	Voltage	Current	Power	Price from (US)
<b>E3631A</b>	Y	3	1	25 V -25 V 6 V	1 A 1 A 5 A	80 W	<b>\$1,294</b>
<b>E3632A</b>	Y	1	2	15 V 30 V	7 A 4 A	120 W	<b>\$1,131</b>
<b>E3633A</b>	Y	1	2	8 V 20 V	20 A 10 A	200 W	<b>\$1,368</b>
<b>E3634A</b>	Y	1	2	25 V 50 V	7 A 4 A	200 W	<b>\$1,368</b>



### E3640A-49A programmable DC power supplies

- Remote sensing—eliminate voltage regulation errors due to drop in load leads
- Front and rear output terminals—flexible measurement setup
- Internal non-volatile memory—store and recall setups fast

#### E3640A-49A

	GPIB, RS-232	Output	Range	Voltage	Current	Power	Price from (US)
<b>E3640A</b>	Y	1	2	8 V 20 V	3 A 1.5 A	30 W	<b>\$739</b>
<b>E3641A</b>	Y	1	2	35 V 60 V	0.8 A 0.5 A	30 W	<b>\$739</b>
<b>E3642A</b>	Y	1	2	8 V 20 V	5 A 2.5 A	50 W	<b>\$788</b>
<b>E3643A</b>	Y	1	2	35 V 60 V	1.4 A 0.8 A	50 W	<b>\$788</b>
<b>E3644A</b>	Y	1	2	8 V 20 V	8 A 4 A	80 W	<b>\$962</b>
<b>E3645A</b>	Y	1	2	35 V 60 V	2.2 A 1.3 A	80 W	<b>\$962</b>
<b>E3646A</b>	Y	2	2	8 V 20 V	3 A 1.5 A	60 W	<b>\$1,033</b>
<b>E3647A</b>	Y	2	2	35 V 60 V	0.8 A 0.5 A	60 W	<b>\$1,033</b>
<b>E3648A</b>	Y	2	2	8 V 20 V	5 A 2.5 A	100 W	<b>\$1,235</b>
<b>E3649A</b>	Y	2	2	35 V 60 V	1.4 A 0.8 A	100 W	<b>\$1,235</b>



## Agilent N5700 and N8700 Series DC system power supplies

### Minimum rack space requirements, maximum flexibility

- 45 affordable models in compact 1U (750 and 1500 W) and 2U (3.3 and 5 kW) packages
- LAN (LXI-C), USB and GPIB to simplify test-system development
- Easy front-panel operation
- Outputs of up to 600 V or up to 400 A

LXI



750 W Models Price from (US) \$2,497	1500 W Models Price from (US) \$2,959	3.3 kW Models Price from (US) \$4,699	5.5 kW Models Price from (US) \$6,512
<b>N5741A</b> 6 V, 100 A, 600 W	<b>N5761A</b> 6 V, 180 A, 1080 W	<b>N8731A</b> 8 V, 400 A, 3200 W	<b>N8754A</b> 20 V, 250 A, 5000 W
<b>N5742A</b> 8 V, 90 A, 720 W	<b>N5762A</b> 8 V, 165 A, 1320 W	<b>N8732A</b> 10 V, 330 A, 3300 W	<b>N8755A</b> 30 V, 170 A, 5100 W
<b>N5743A</b> 12.5 V, 60 A, 750 W	<b>N5763A</b> 12.5 V, 120 A, 1500 W	<b>N8733A</b> 15 V, 220 A, 3300 W	<b>N8756A</b> 40 V, 125 A, 5000 W
<b>N5744A</b> 20 V, 38 A, 760 W	<b>N5764A</b> 20 V, 76 A, 1520 W	<b>N8734A</b> 20 V, 165 A, 3300 W	<b>N8757A</b> 60 V, 85 A, 5100 W
<b>N5745A</b> 30 V, 25 A, 760 W	<b>N5765A</b> 30 V, 50 A, 1500 W	<b>N8735A</b> 30 V, 110 A, 3300 W	<b>N8758A</b> 80 V, 65 A, 5200 W
<b>N5746A</b> 40 V, 19 A, 760 W	<b>N5766A</b> 40 V, 38 A, 1520 W	<b>N8736A</b> 40 V, 85 A, 3300 W	<b>N8759A</b> 100 V, 50 A, 5000 W
<b>N5747A</b> 60 V, 12.5 A, 750 W	<b>N5767A</b> 60 V, 25 A, 1500 W	<b>N8737A</b> 60 V, 55 A, 3300 W	<b>N8760A</b> 150 V, 34 A, 5100 W
<b>N5748A</b> 80 V, 9.5 A, 760 W	<b>N5768A</b> 80 V, 19 A, 1520 W	<b>N8738A</b> 80 V, 42 A, 3300 W	<b>N8761A</b> 300 V, 17 A, 5100 W
<b>N5749A</b> 100 V, 7.5 A, 750 W	<b>N5769A</b> 100 V, 15 A, 1500 W	<b>N8739A</b> 100 V, 33 A, 3300 W	<b>N8762A</b> 600 V, 8.5 A, 5100 W
<b>N5750A</b> 150 V, 5 A, 750 W	<b>N5770A</b> 150 V, 10 A, 1500 W	<b>N8740A</b> 150 V, 22 A, 3300 W	
<b>N5751A</b> 300 V, 2.5 A, 750 W	<b>N5771A</b> 300 V, 5 A, 1500 W	<b>N8741A</b> 300 V, 11 A, 3300 W	
<b>N5752A</b> 600 V, 1.3 A, 780 W	<b>N5772A</b> 600 V, 2.6 A, 1560 W	<b>N8742A</b> 600 V, 5.5 A, 3300 W	

## Agilent 6600 Series high performance single output DC system power supplies

### Speed and accuracy for test optimization

- 40 W to 6600 W outputs, up to 120 V, and up to 875 A
- Fast, low-noise outputs increases test throughput
- Extensive programming capability for flexible system design
- Built-in measurements and advance programming features simplifies system design
- Computer control via GPIB



6611C

Model	Max power	Max voltage (V)	Max current (A)	Price from (US)
<b>6611-14C</b>	40-50	8-100	0.5-5	<b>\$2,244</b>
<b>6631-34B</b>	80-100	8-100	1-10	<b>\$2,518</b>
<b>6641-45A</b>	160-200	8-120	1.5-20	<b>\$2,834</b>
<b>6651-55A</b>	400-540	8-120	4-50	<b>\$3,484</b>
<b>6671-75A</b>	1760-2100	8-120	18-220	<b>\$4,998</b>
<b>6680-84A</b>	4375-5120	5-40	128-875	<b>\$8,070</b>
<b>6690-92A</b>	6600	15-60	110-440	<b>\$8,991</b>

## Agilent N6700 Series DC system power supplies

- Multiple-output power supply system lets you mix and match from 22 different 50 W, 100 W, or 300 W DC power modules
- LAN (LXI-C), USB and GPIB—to simplify test-system development
- Improve your throughput with fast settling times and fast command processing (<1 ms)

### Mainframes

Model	Description	Price from (US)
<b>N6700B</b>	Low-profile MPS (400 W)	<b>\$2,434</b>
<b>N6701A</b>	Low-profile MPS (600 W)	<b>\$2,761</b>
<b>N6702A</b>	Low-profile MPS (1200 W)	<b>\$3,466</b>

LXI



50 W Models Price from (US) \$517		100 W Models Price from (US) \$953		300 W Models Price from (US) \$1,382	
<b>N6731B</b>	5 V, 10 A	<b>N6741B</b>	5 V, 20 A	<b>N6773A</b>	20 V, 15 A
<b>N6732B</b>	8 V, 6.25 A	<b>N6742B</b>	8 V, 12.5 A	<b>N6774A</b>	35 V, 8.5 A
<b>N6733B</b>	20 V, 2.5 A	<b>N6743B</b>	20 V, 5 A	<b>N6775A</b>	60 V, 5 A
<b>N6734B</b>	35 V, 1.5 A	<b>N6744B</b>	35 V, 3 A	<b>N6776A</b>	100 V, 3 A
<b>N6735B</b>	60 V, 0.8 A	<b>N6745B</b>	60 V, 1.6 A	<b>N6753A</b>	20 V, 50 A
<b>N6736B</b>	100 V, 0.5 A	<b>N6746B</b>	100 V, 1 A	<b>N6754A</b>	60 V, 20 A
<b>N6751A</b>	50 V, 5 A	<b>N6752A</b>	50 V, 10 A		
<b>N6761A</b>	50 V, 1.5 A	<b>N6762A</b>	50 V, 3 A		
	Precision		Precision		

Modules must be installed in one of the N6700 mainframes, sold separately.

## Agilent N6705A DC power analyzer

*Gain insights into your  
DUT's power consumption  
—in minutes, not hours—  
without writing a  
single line of code*

- Save time and increase your productivity for sourcing and measuring DC voltage and current into your DUT—this instrument integrates up to four advanced power supplies with DMM, scope, arb, and data logger features
- Tailor the N6705A to meet your needs using the same modules for the N6700 (listed above)

Price from (US) \$7,037



*The most  
award-winning  
product in  
Agilent's  
history!*

## Agilent 6030 Series basic auto ranging DC power supplies

### Auto-ranging to do the job of multiple power supplies

- 240 W to 1200 W outputs, up to 500 V, and up to 120 A
- Built-in measurements and advance programming features simplifies system design
- Full protection from over-voltage and over-current
- Computer control via GPIB

Model	Max power	Max voltage (V)	Max current (A)	Price from (US)
<b>6030A</b>	1200	200	17	<b>\$5,870</b>
<b>6031A</b>	1064	20	120	<b>\$5,870</b>
<b>6032A</b>	1200	60	50	<b>\$5,870</b>
<b>6033A</b>	242	20	30	<b>\$4,404</b>
<b>6035A</b>	1050	500	5	<b>\$6,466</b>
<b>6038A</b>	240	60	10	<b>\$4,404</b>



6032A

## Agilent 6800 Series AC power source/analyzer

### Generation, measurement and AC analysis in one box

- Up to 1750 VA of single phase AC power and 1350 W of DC power in a single instrument
- Over-current, over-voltage, over-power, over-temperature protection, output disconnect relays and remote inhibit capabilities to protect valuable DUTs
- Free Graphical User Interfaces (GUIs) with the AC Analyzer software and Microsoft® Excel Link connected through GPIB



	6811B	6812B	6813B
<b>Number of phases</b>	1	1	1
<b>Output ratings (maximum)</b>			
<b>Power</b>	375 VA	750 VA	1750 VA
<b>Voltage (rms)</b>	300 V	300 V	300 V
<b>Current (rms)</b>	3.25 A	6.5 A	13 A
<b>Repetitive &amp; non-repetitive peak current</b>	40	40	80
<b>Crest factor</b>	12	6	6
<b>Load power factor capability</b>	0 to 1		
<b>DC power</b>	285 W	575 W	1350 W
<b>DC voltage</b>	±425 V	±425 V	±425 V
<b>Price from (US)</b>	<b>\$6,865</b>	<b>\$8,381</b>	<b>\$11,539</b>

## Agilent N3300 Series DC electronic loads

### Increase your manufacturing test throughput with fast electronic loads

This series consists of 2 mainframes and 6 modules. The N3300A mainframe is full rack width with 6 slots. The N3301A mainframe is half rack width with 2 slots. Any assortment of the 6 different modules can be configured into these mainframes, up to the slot capacity.

- Mix and match up to 6 modules as single, parallel or series outputs for up to 1800 W in a single mainframe
- Measure voltage and current on each electronic load module simultaneously in constant current (CC), constant voltage (CV) and constant resistance (CR) mode
- Observe transient behavior using waveform digitization and 4096 data point buffer
- Automatically execute stored command sequences



Input ratings	N3302A	N3303A	N3304A	N3305A	N3306A	N3307A
<b>Current</b>	0–30 A	0–10 A	0–60 A	0–60 A	0–120 A	0–30 A
<b>Voltage</b>	0–60 V	0–240 V	0–60 V	0–150 V	0–60 V	0–150 V
<b>Maximum power @ 40°C</b>	150 W	250 W	300 W	500 W	600 W	250 W
<b>Price from (US)</b>	<b>\$1,653</b>	<b>\$2,354</b>	<b>\$2,044</b>	<b>\$3,014</b>	<b>\$2,900</b>	<b>\$2,194</b>



## Agilent 16800 Series portable logic analyzers

*Debug and validate your digital system—at a price that fits your budget*

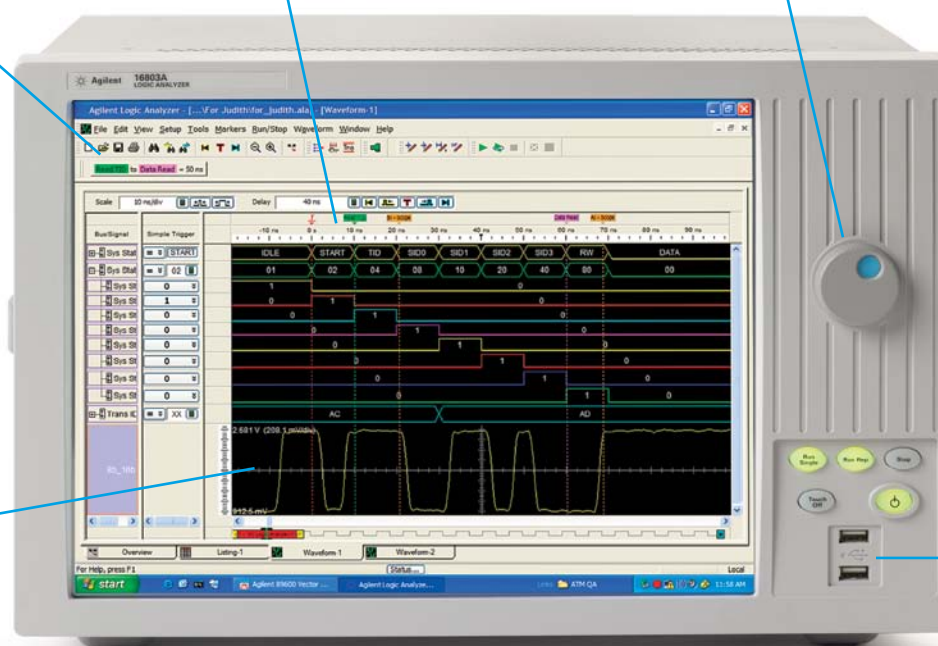
- Choose from 8 models to get the measurement capability for your specific application. Purchase what you need now then upgrade as your memory depth and state speed needs evolve
- Large 38.1-cm (15-in) color display allows you to view relationships between large numbers of signals and buses so you can identify a problem sooner
- Up to 32 M-deep memory helps you identify the root cause of a problem and symptom that are widely separated in time

15-inch color display provides a viewing area more than twice as large as other logic analyzers in its class

Available touch screen gives direct access to all logic analyzer functionality

General purpose knob quickly adjusts viewing and measurement parameters. Select a modifiable variable, then turn the knob to quickly step through values for the variable

View signal integrity and timing relationships between analog and digital domains by seamlessly integrating scope and logic analyzer waveforms into a single display



Six 2.0 USB ports, two in front, four in the rear, "hot connect" a mouse, keyboard or USB storage drives

Model	16801A	16802A	16803A	16804A	16806A
	16821A	16822A	16823A		
Logic analyzer channels	34	68	102	136	204
Pattern generator channels	48	48	48	N/A	N/A
High speed timing zoom	4 GHz (250 ps) with 64 K depth				
Maximum timing sample rate	1.0 GHz (1.0 ns) half channel / 500 MHz (2.0 ns) full channel				
Maximum state clock rate	250 MHz	450 MHz with Option 500 / 250 MHz with Option 250			
Maximum state data rate	250 Mb/s	500 Mb/s with Option 500 / 250 Mb/s with Option 250			
Maximum memory depth	1 M standard, 4, 16 or 32 M optional				
Supported signal types	Single-ended				
Price from (US)	\$10,716	\$13,700	\$16,298	\$19,203	\$31,471
	\$22,421	\$24,976	\$27,652		

# InfiniiVision

## Agilent InfiniiVision Series oscilloscopes: Engineered for the best signal visibility

Thanks to MegaZoom III technology, every InfiniiVision scope provides responsive deep memory allowing you to see subtle signal details and infrequent events that other scopes miss.

InfiniiVision scopes also include:

- Patented MegaZoom III custom ASIC technology designed to provide 100,000 deep-memory waveforms per second
- XGA display with 256 intensity levels to show subtle signal detail
- 8 Mpts memory standard
- User-installable DSO to MSO upgrade paths on 6000 and 7000 Series
- Hardware-based serial data analysis
- Standard XGA, USB, LAN on all models, and GPIB on 5000/6000 models
- Standard 3-year warranty

### Agilent InfiniiVision 5000 Series oscilloscopes

#### Affordable performance in a compact package

- DSO models from 100 MHz to 500 MHz for both analog and serial measurements
- Compact form factor with built-in probe storage



### Agilent InfiniiVision 6000 Series oscilloscopes

#### Integrated measurements for analog, digital, and serial designs

- DSO and MSO models from 100 MHz to 1 GHz for analog, digital, or serial measurements
- Stackable form factor with built-in storage
- Battery option available
- 1U high version available for manufacturing applications



	DSO5012A DSO6012A DSO7012B	MSO7012B	DSO5014A DSO6014A DSO7014B	MSO7014B	DSO5032A DSO6032A DSO7032B	MSO6032A MSO7032B	DSO5034A DSO6034A DSO7034B	MSO6034A MSO7034B
<b>Bandwidth</b>	100 MHz				300 MHz / 350 MHz			
<b>Channels</b>	2	2+16	4	4+16	2	2+16	4	4+16
<b>Price from (US)</b>	\$4,550	\$6,802	\$5,400	\$8,050	\$6,500	\$9,800	\$7,742	\$11,700

## InfiniiVision Applications

Gain even greater insight into your problem with these powerful InfiniiVision applications

	Model	Description	5000	6000	7000	Price from (US)
	N5423A	I <sup>2</sup> C/SPI trigger and decode	4 ch	4 ch	4 ch	\$1,500
	N5424A	CAN/LIN trigger and decode	4 ch	4 ch	4 ch	\$1,500
NEW	N5432C	FlexRay trigger and decode	4 ch	4 ch	4 ch	\$4,500
	N5457A	RS-232/UART trigger and decode	4 ch	4 ch	4 ch	\$1,500
NEW	N5468A	I <sup>2</sup> S trigger and decode	4 ch	4 ch	4 ch	\$1,500
NEW	N5469A	MIL-STD 1553 trigger and decode	4 ch	4 ch	4 ch	\$1,500
	N5406A	Xilinx FPGA dynamic probe		MSO	MSO	\$1,700
	N5434A	Altera FPGA dynamic probe		MSO	MSO	\$1,700
	B4610A	PC off-line viewing	X	X	X	\$585
	N5454A	Segmented memory	X	X	X	\$1,500
	N5455A	Mask/waveform limit testing	X	X	X	\$750
	U1881A	Power measurement	X	X	X	\$1,700
	89601A	Vector signal analysis		X	X	\$8,035

## Agilent InfiniiVision 7000B Series oscilloscopes

*Engineered for the best signal visibility*

- 30.7 cm (12.1 in) display—nearly 40% larger than the nearest competitor
- DSO and MSO models from 100 MHz to 1 GHz for analog, digital or serial measurements
- New search and navigation capabilities
- New front panel with push knobs that improve direct access to features



	DSO5052A DSO6052A DSO7052B	MSO6052A MSO7052B	DSO5054A DSO6054A DSO7054B	MSO6054A MSO7054B	DSO6102A	MSO6102A	DSO6104A DSO7104B	MSO6104A MSO7104B
Bandwidth	500 MHz				1 GHz			
Channels	2	2+16	4	4+16	2	2+16	4	4+16
Price from (US)	\$9,400	\$14,042	\$10,978	\$15,691	\$13,681	\$17,575	\$15,466	\$19,500



## Agilent 1000 Series portable oscilloscopes

*Engineered to give you more scope than you thought you could afford*

Performance and features you expect in a big scope—and the portability and low price you require in a small one.

- 20 kpts memory per channel, up to 8 times more than competitive scopes, means you can see more time and more detail on your signal
- Unique to its class, sequence mode allows easy debug with waveform recording, playback and storage
- Go/no-go mask testing automatically detects waveforms that deviate from the standard you set



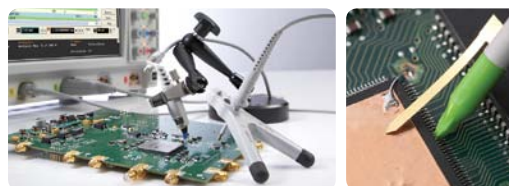
Weighing less than 3.2 kg (7 lbs) with a small footprint—the 1000 Series can go anywhere with ease.

	DS01002A	DS01004A	DS01012A	DS01014A	DS01022A	DS01024A
Bandwidth	60 MHz		100 MHz		200 MHz	
Timebase	5 nsec/div to 50 sec/div		2 nsec/div to 50 sec/div		1 nsec/div to 50 sec/div	
Real time sample rate	2 GSa/s half channel, 1 GSa/s each channel					
Memory depth	20 kpts half channel, 10 kpts each channel					
Channels	2	4	2	4	2	4
Price (US)	\$1,142	\$1,733	\$1,368	\$2,084	\$1,959	\$2,415

## Probes

*Get the most from your oscilloscope*

Agilent offers an innovative family of oscilloscope probes that are engineered for signal access and measurement accuracy.



	1000 Series		5000 Series		6000/7000 Series		9000 Series
<b>Scope bandwidth</b>	60-100 MHz	200 MHz	100-300 MHz	500 MHz	100 MHz (6000 only)	300 MHz–1 GHz	600 MHz–4 GHz
<b>Probe interface</b>	BNC	BNC	AutoProbe Lite	AutoProbe Lite	BNC (6000), AutoProbe Lite (7000)	AutoProbe Lite	AutoProbe
<b>Standard probe</b>	N2862A	N2863A	N2863A	10073D	10074C	10073C	N2873A
<b>Passive probe 1:1</b>	10070C N2870A	10070C N2870A	10070C N2870A	10070C, N2870A	10070C, N2870A	10070C or N2870A	10070C, N2870A
<b>Passive probe 10:1</b>	N2862A	N2863A	N2863A, N2871A/72A	10073D, N2873A	10074C, N2871A	10073D, N2873A	N2873
<b>High-voltage passive probe 100:1</b>	10076A		10076A		10076A		10076A
<b>High-voltage passive probe 1000:1</b>	N2771A		N2771A		N2771A		N2771A
<b>Low Z passive probe</b>			N2874A, N2876A	N2874A, N2876A		N2874A, N2876A	N2874A, N2876A
<b>Active single-ended probe</b>			1144A <sup>1</sup>	1156A, 1145A <sup>1</sup> , 1144A	1144A <sup>1</sup> , 1145A <sup>1</sup> (for 7000)	1144A <sup>1</sup> , 1145A <sup>1</sup> 1156A or 1130A <sup>3</sup> with SE probe accessory	1156A/57A/58A, 1130A/31A/32A <sup>3</sup>
<b>Active differential probe (high speed)</b>			1141A <sup>1</sup>	1130A <sup>3</sup> or 1141A <sup>1</sup>	1141A <sup>1</sup> (for 7000)	1130A <sup>3</sup> or 1141A <sup>1</sup>	1130A/31A/32A <sup>3</sup>
<b>Active differential probe (high voltage)</b>	N2791A/92A/93A/891A		N2790A/91A/ 92A/93A/891A	N2790A/91A/ 92A/93A/891A	N2790A/91A/ 92A/93A/891A	N2790A/91A/ 92A/93A/891A	N2790A/91A/ 92A/93A/891A
<b>Current probe</b>	1146A, N2780A/81A/82A/83A <sup>2</sup>		1146A, 1147A, N2780A/81A/82A/83A <sup>2</sup>		1146A, N2780A/ 81A/82A/83A <sup>2</sup>	1146A, 1147A, N2780A/81A/82A/83A <sup>2</sup>	1146A, 1147A, N2789A/81A/ 82A/83A <sup>2</sup>
<b>Rackmount kit</b>	N2739A	N2739A	N2916B	N2916A	N2916B (for 6000), N2732A (for 7000)	N2916B (for 6000) N2732A (for 7000)	N2902A
<b>Carrying case</b>	N2738A	N2738A	N2917B (hard) or N2760A (soft)		N2917B (hard for 6000), N2732A (soft for 7000)	N2917B (hard for 6000), N2733A (soft for 7000)	
<b>Testmobile</b>	1180CZ	1180CZ	1180CZ	1180CZ	1180CZ with N2919A bracket (for 6000), 1180CZ (for 7000)		1181BZ

1. Requires 1142A power supply

2. Requires N2779A power supply

3. Order one or more InfiniiMax probe heads or connectivity kits per amplifier

## Agilent U2701/02A USB modular oscilloscopes

*Engineered for versatility and portability without compromising performance*

Capture signal details effectively with these 2-channel, 8-bit oscilloscopes.

- Provides up to 1 GSa/s (interleaved) sampling and 32 Mpts of memory to help you gain better insight into signal details
- Fast Fourier transfer (FFT) and waveform math functions enable easy waveform calculation
- Flexibility with standalone and modular (with U2781A USB modular product chassis) capability



	U2701A	U2702A
<b>Bandwidth</b>	100 MHz	200 MHz
<b>Maximum sample rate</b>	1 GSa/s	
<b>Additional features</b>	Waveform Zoom and Maths Function 26 pre-build automatic measurements Advance Triggering including edge, pulse width and line selectable video	
<b>Price from (US)</b>	<b>\$1,358</b>	<b>\$1,674</b>

**Other available modular instruments include:**

- U2761A** 20 MHz function generator
- U2741A** 5½ digit multimeter
- U2751A** 4x8 switch matrix
- U2722A/23A** 3-channel source measurement units (SMUs)
- U2781A** USB modular products chassis



## Agilent Infiniium 9000 Series oscilloscopes

*Engineered for broadest measurement capability*

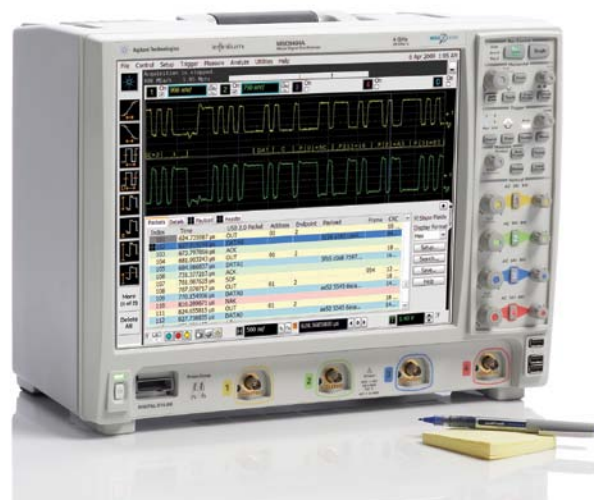
- Three instruments in one:

**Oscilloscope:** Fast sample and update rates let you see a precise representation of your signal. Scope is packed with features and analysis capabilities

**Logic analyzer:** Fast, deep-memory digital channels show critical data values and timing relationships

**Protocol analyzer:** World's first scope based protocol viewer with multi-tab viewing so you can quickly move between protocol and physical layers

- Widest range of application-specific software for debug, analysis and compliance testing
- Sized to fit your environment with the largest display 38.1 cm, (15 in), a smaller depth 22.9 cm, (9 in) and lighter weight 11.8 kgs, (26 lbs) than any other scope in its class



	DS09064A	MS09064A	DS09104A	MS09104A	DS09254A	MS09254A	DS09404A	MS09404A
<b>Bandwidth</b>	600 MHz		1 GHz		2.5 GHz		4 GHz	
<b>Channels</b>	4	4+16 digital	4	4+16 digital	4	4+16 digital	4	4+16 digital
<b>Price from (US)</b>	<b>\$17,000</b>	<b>\$21,000</b>	<b>\$21,000</b>	<b>\$25,200</b>	<b>\$29,000</b>	<b>\$33,900</b>	<b>\$40,500</b>	<b>\$45,000</b>

## Choose the best benchtop DMM for your application

### Lab accuracy at production-line speeds

#### U3606A multimeter/DC power supply

##### Two independent and full-featured instruments, half the space

Allows simultaneous supply-and-measure operations

- DMM: 120,000 count resolution with DCV accuracy 0.025%
- Power supply: dual range 30 V/1 A or 8 V/3 A output with OVP and OCP protection. Ability to source constant-current directly
- Securable with PC-grade physical lock



5½ digit  
U3606A

#### U3401A/2A low-cost DMMs

##### Low-cost basic dual display DMMs for tight budgets

- 120,000 count resolution (50,000 count for U3401A)
- Up to 0.012% DCV accuracy
- 11 basic measurements
- 6 built-in math functions
- Securable with PC-grade physical lock



4½ digit  
U3401A

#### 34405A 5½ digit economy DMM

##### Dual display at an affordable price

- 16 measurement functions including temperature and capacitance
- 120,000 count resolution
- 0.025% DC voltage accuracy



5½ digit  
34405A

#### 34410A/11A/01A 6½ digit high-performance DMM

##### Fast, accurate and affordable bench and system testing

- 0.0030% basic DC accuracy
- Capacitance and temperature measurements
- Data logger with 50,000 reading non-volatile memory
- Built-in LAN (LXI, Class C), USB 2.0 and GPIB interfaces standard
- IntuLink software included for easy data logging
- 1U high version available for manufacturing applications



6½ digit  
34411A

Handheld  
DMMs  
on  
page 8

	U3401A	U3402A	U3606A	34405A	34401A	34410A	34411A
Digits of resolution	4½	5½	5½	5½	6½	6½	6½
Measurement speed (rdgs/s)	N/A	N/A	37	19	1,000	10,000	50,000
Temperature	N/A	N/A	N/A	Thermistor	N/A	Thermistor, RTD	Thermistor, RTD
Connectivity	N/A	N/A	USB 2.0, GPIB, USBTMC 488.2 Class Device	USB 2.0	GPIB, RS-232	LAN, USB 2.0, GPIB, plus LXI class C compliant	
				IntuiLink software—provides a toolbar in Microsoft Word and Excel to import multimeter data for further analysis			
Voltage	DC, true RMS AC, AC+DC		DC, true RMS AC	DC, AC			
Current	DC, true RMS AC, AC+DC		DC, true RMS AC	DC, AC			
Resistance	2-wire	2-wire, 4-wire	2-wire, 4-wire mΩ	2-wire	2-wire, 4-wire	2-wire, 4-wire	
Other	Frequency, diode, continuity		Capacitance, frequency, diode, continuity		Frequency, period	Capacitance, frequency, period	
Price from (US)	\$450	\$600	\$1,201	\$750	\$1,072	\$1,298	\$2,067



### 34401A 6½ digit

*The industry-standard DMM*

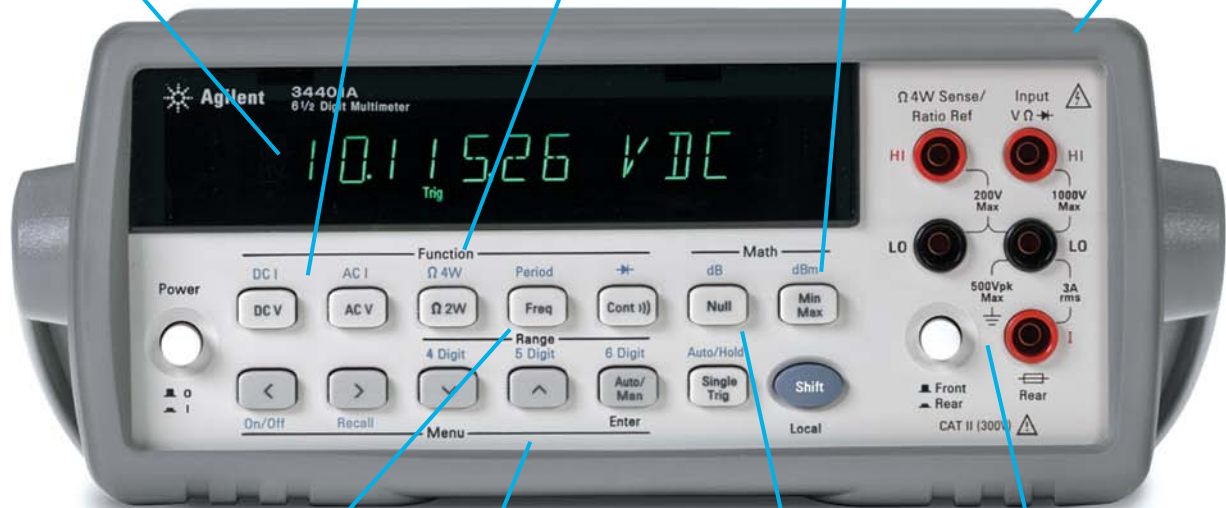
1,000 readings/sec in ASCII format across the GPIB bus at 4½ digits continuous

Store up to 512 readings in internal memory

12 measurement functions including 4-wire  $\Omega$ , continuity and diode test

Limit testing ratio and min/max average

IntuiLink PC connectivity software included, GPIB and RS-232 standard, USB with adaptor, SCPI commands for easy system use



6½ digit 34401A

3 Hz to 300 kHz AC bandwidth

System capable with configuration rates starting at 26/sec and autorange rate (DCV) >30/sec

Null allows you to remove lead resistance and other fixed offsets in your measurements

0.0035 1-year DCV accuracy  
0.060 1-year ACV accuracy  
0.010 basic  $\Omega$  accuracy

### 34420A 7½ digit nanovolt/micro-ohm meter

*High-sensitivity multimeter optimized for low-level measurements*

- 0.1-ppm transfer accuracy
- Low-noise voltage measurements with resistance and temperature functions
- 100 pV/100 n $\Omega$  sensitivity

Price from (US) \$3,942



7½ digit 34420A

### 3458A high-speed DMM

*Get both high accuracy and high system throughput*

- 0.1-ppm transfer accuracy
- 8-ppm 1-year DCV accuracy, optional 4-ppm
- 0.05 ppm DCV transfer accuracy
- Superior AC voltage measurement

Price from (US) \$8,260



8½ digit 3458A

## Agilent function/arbitrary waveform generators

*Buy the function/arbitrary waveform generator that you need—don't sacrifice quality*

*Produce clean, low-distortion signals with THD less than 0.04% and flatness as low as  $\pm 0.1$  dB*

**33220A:** Low-cost and full-featured function generator provides arbitrary waveforms at no extra cost. Includes a 64 K point arbitrary waveform generator standard as well as sine and square waves up to 20 MHz



**33250A:** Competitively priced 80 MHz function/arbitrary waveform generator—if you need higher frequency than the 33220A offers

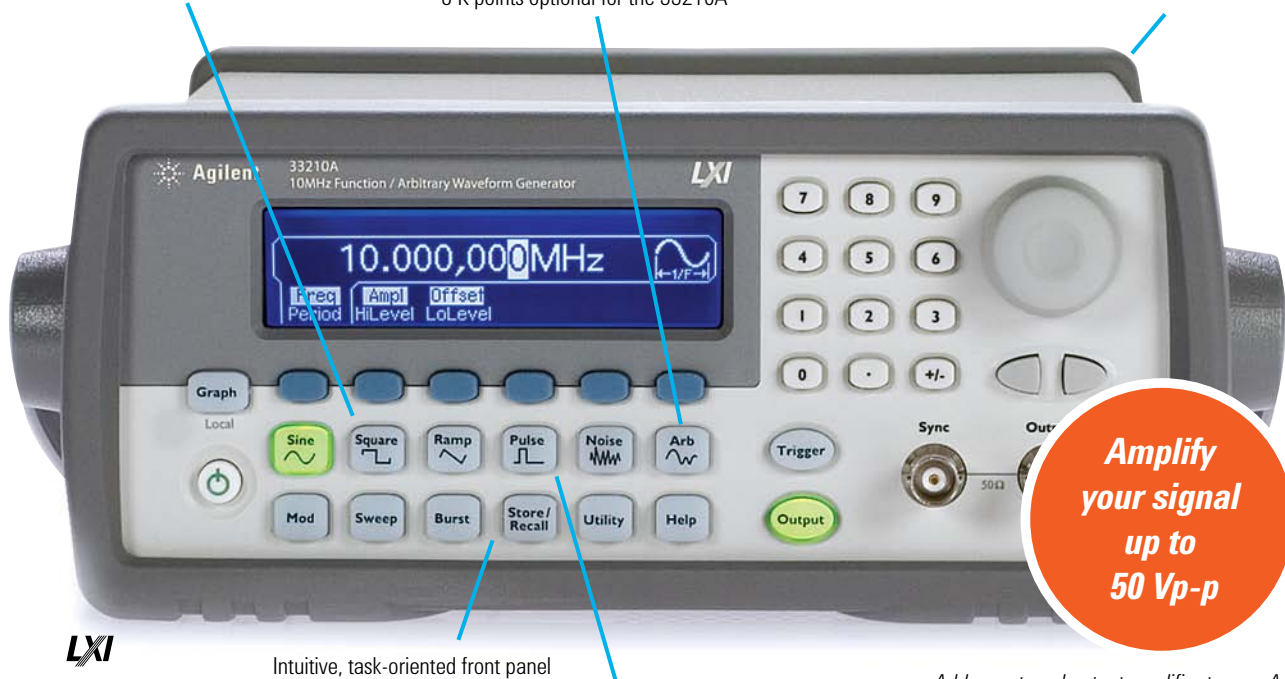


**33210A:** When a basic 10 MHz function generator is needed but with the flexibility to upgrade at any time

Standard waveforms—including sine and square wave, ramp, pulse, noise and burst 10, 20 or 80 MHz

Arbitrary waveforms 2 points to 64 K points at 50 MSa/s or 200 MSa/s standard on the 33220A and 33250A. Arbitrary waveforms with 8 K points optional for the 33210A

External frequency reference synchronizes to an external 10 MHz clock or another 33210A, 33220A, 33250A—optional for the 33210A and 33220A, standard on the 33250A (back panel)



**Amplify  
your signal  
up to  
50 Vp-p**

Add an external output amplifier to your Agilent function generator to provide low distortion higher voltage outputs for demanding applications.

**Agilent 33502A 2-ch, 50 Vp-p  
isolated amplifier**

*Quad versatility; optimum signal fidelity*

**81150A:** Integrated 120 MHz pulse, function/arbitrary waveform and noise generator—four instruments in one—with pulse capabilities, higher bandwidth, 13 standard functions and more than 80 measurements available.

- Intrinsic jitter < 8 ps RMS at any frequency
- Flexible noise and selectable crest factor for realistic test signals
- Upgrade to arbitrary bit-shaped pattern generator to emulate real-world test patterns



	33210A	33220A	33250A	81150A
<b>Sine wave frequency</b>	10 MHz	20 MHz	80 MHz	240 MHz
<b>Standard waveforms</b>	Sine, square, ramp, pulse, noise, DC volts	Sine, square, pulse, triangle, ramp, noise, sin(x)/x, exponential rise and fall, cardiac, DC volts		Pulse, sine, square, triangle, (x)/x, ramp, noise, optional pattern
<b>Arbitrary waveforms</b>	Optional 8 K points, sin(x)/x, exponential rise and fall, cardiac	2 to 64 K points		14-bit, 2 GSa/s
<b>Sample rate</b>	50 MSa/s	50 MSa/s	200 MSa/s	2 GSa/s
<b>Modulation</b>	AM, FM PWM, sweep and burst (all internal/external)	AM, FM, PM, FSK, PWM, sweep and burst (all internal/external)	AM, FM, FSK, sweep and burst (all internal/external)	FM, AM, PW, PWM, FSK modulation capabilities up to 10 MHz
<b>Burst</b>	Gated, N-cycle	Gated, N-cycle	Gated, N-cycle	Gated, N-cycle
<b>Noise generation</b>	7 MHz	9 MHz	50 MHz	120 MHz
<b>Pulse width range</b>	40 ns	20 ns	20 ns	4.16 ns (period – 4.16 ns)
<b>Connectivity</b>	GPIO, USB, LAN, LXI class C compliant (IntuiLink software included)	GPIO, USB, LAN, LXI class C compliant (IntuiLink software included)	GPIO/RS-232	GPIO, USB, LAN, LXI class C compliant (IntuiLink software included)
<b>Price from (US)</b>	<b>\$1,197</b>	<b>\$1,863</b>	<b>\$4,579</b>	<b>\$9,763</b>

**Agilent 81100A pulse pattern generator series****Flexible pulses and patterns for digital designs**

A pulse pattern generator family covering a frequency range from 15 MHz up to 660 MHz. Fully triggerable with variable width, delay and transition time

**Price from (US)**

<b>8114A</b>	15 MHz, 100 V/2A	<b>\$26,153</b>
<b>81101A</b>	50 MHz, 10 Vp-p	<b>\$9,538</b>
<b>81104A</b>	80 MHz, up to 10 Vp-p	<b>\$11,072*</b>
<b>81110A</b>	165 MHz/10 V or 330 MHz/3.8 V	<b>\$15,046*</b>
<b>81130A</b>	400 MHz/3.8 V or 660 MHz/2.5 V	<b>\$18,135*</b>

8114A



81101A



\* Price reflects mainframe unit and one output channel.





## **GPIB, LAN and USB tools for PC/instrument connectivity**



### **Converters**

Mix and match virtually any combination of instruments and interfaces.

Easily establish error-free connections in less than 15 minutes using Agilent IO Libraries Suite.

From...	To converter...	To PC via...	Features
GPIB...	<b>Agilent 82357B USB/GPIB interface</b> 	...USB	<ul style="list-style-type: none"> <li>High-speed USB 2.0 with auto configuration</li> <li>GPIB transfer rate of more than 1.15 MB/s</li> <li>Connect up to 14 GPIB instruments (daisy-chained)</li> </ul> <b>Price from (US) \$541</b>
GPIB...	<b>Agilent E5810A LAN/GPIB gateway</b> 	...LAN	<ul style="list-style-type: none"> <li>Share equipment and collaborate globally</li> <li>10BASE-T/100BASE-TX LAN for remote control of GPIB instruments</li> <li>Digital display and built-in Web browser for easy setup/configuration</li> </ul> <b>Price from (US) \$1,112</b>
USB...	<b>Agilent E5813A networked 5-port USB hub</b> 	...LAN	<ul style="list-style-type: none"> <li>Connect USB devices anywhere on the LAN</li> <li>Eliminates 5 m (16.4 ft) distance limitation for USB</li> <li>No switches to set, no PC cards to install</li> </ul> <b>Price from (US) \$481</b>
RS-232...	<b>Agilent E5805A USB/4-port RS-232 interface</b> 	...USB	<ul style="list-style-type: none"> <li>Easy connection from PC's USB port to up to four RS-232 instruments</li> <li>Fully compatible with Windows® COM driver and industry-standard VISA IO software</li> <li>No switches or external power supplies required</li> <li>Transfer rates up to 230 Kbps on each RS-232 port</li> </ul> <b>Price from (US) \$371</b>

### **GPIB Cards**

Easily control instruments and exchange data with maximum throughput.

#### **Agilent 82350B PCI high-performance GPIB interface card**

<b>Speed</b>	Built-in buffering; speeds up to 900 KB/s
<b>Size</b>	Full PCI height
<b>Power</b>	5 V
<b>Price from (US)</b>	<b>\$531</b>

#### **Agilent 82351A PCIe®-GPIB interface card**

<b>Speed</b>	1.4 MB/s transfer rate
<b>Size</b>	Compact half-height
<b>Power</b>	3.3 V
<b>Price from (US)</b>	<b>\$551</b>



### **GPIB Cables and Adapters**

**10833A/B/C/D/F or G GPIB cables:** Easily connect your GPIB instruments with a PC GPIB interface using reliable and durable Agilent GPIB cables. These cables are available in various lengths ranging from 0.5 meter (1.6 ft) to 8 meters (26.2 ft). Daisy-chain multiple cables together if necessary

**Price from (US) \$80**

**10834A GPIB to GPIB adapter:** The adapter extends the cable approximately 2.3 cm (0.9 in) away from the rear panel to provide clearance for other connectors, switches, and cables

**Price from (US) \$41**



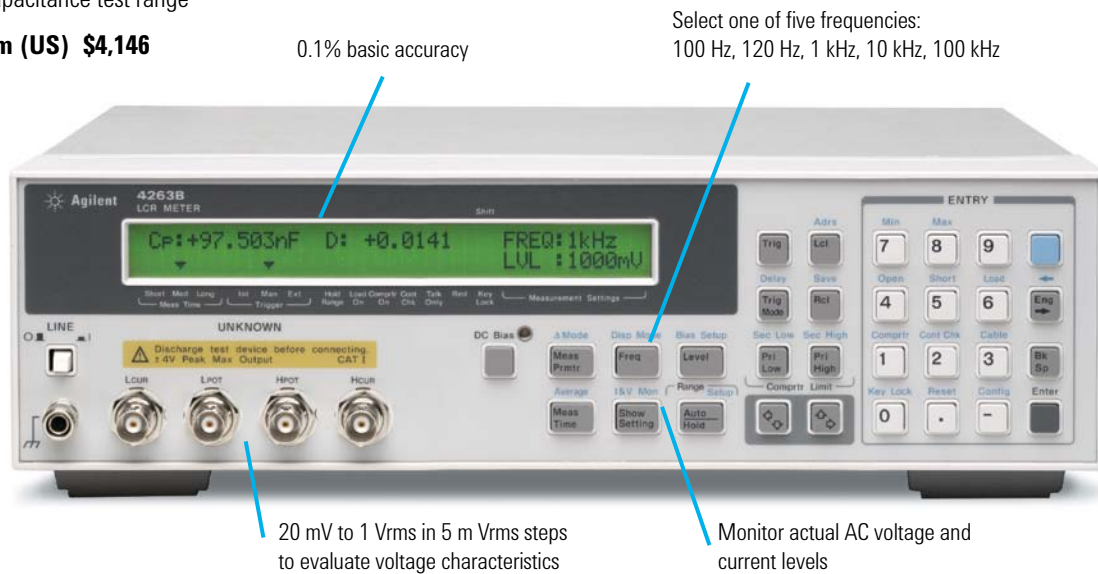
## Agilent 4263B LCR meter

*Fast, reliable, and versatile testing at a low cost*

Designed for both component evaluation on the production line and fundamental impedance testing for benchtop applications.

- High-speed measurement: 25 ms
- Wide capacitance test range

**Price from (US) \$4,146**



## Agilent E4980A precision LCR meter

*Precise, reliable, high-speed test for both high and low impedance measurements*

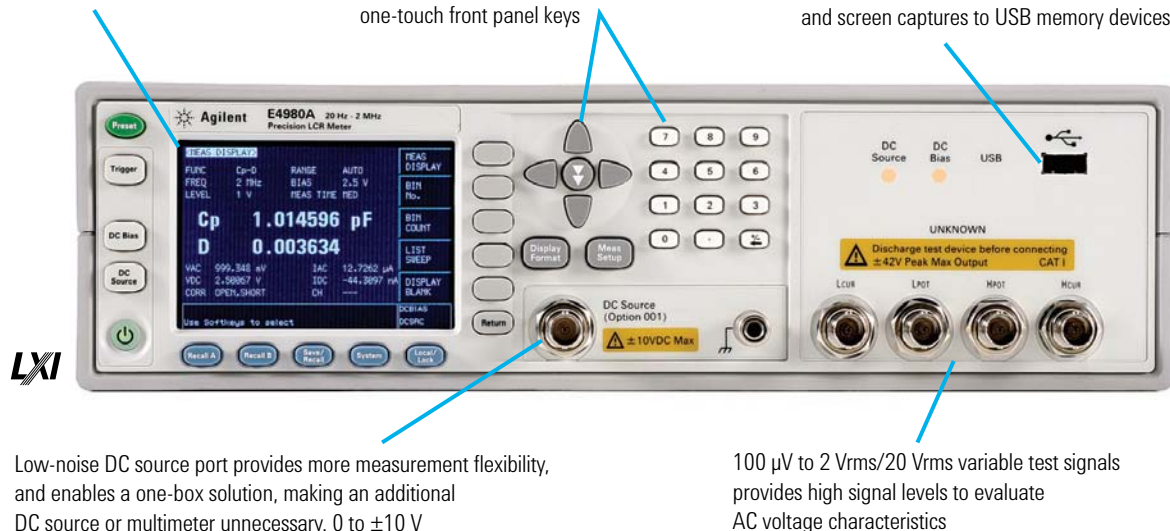
- Five times faster than the Agilent 4284A LCR meter
- Make accurate, repeatable measurements from 20 Hz to 2 MHz

**Price from (US) \$16,302**

Full, 7-digit display and 6 display modes  
for clear and easy viewing

Easily configure measurements with softkeys  
(same interface as Agilent 4284A) and  
one-touch front panel keys

USB interface (Memory devices only)  
easily saves measurement states, data logs,  
and screen captures to USB memory devices



## Agilent N1913A/14A EPM Series power meters

### Replacing the popular Agilent E4418B/19B EPM meters with greater capability

- Get up to four channels to speed and simplify RF average power measurements
- Measure faster with improved measurement speed of 400 readings/s with the Agilent E-Series sensors
- View test results more easily with the industry's first color LCD readout in an average power meter
- Go beyond GPIB with USB and LAN/LXI-C interfaces
- Automate frequency/power sweep measurements with the optional external trigger in/out feature

**Price from (US) \$3,888**



### EPM-P Series power meters (E4416A/17A)

Advanced capabilities for advanced power measurements.

- Accurately profile complex modulation formats of up to 5 MHz video bandwidth with 20 MSa/s continuous sampling rate
- PC software included for power and statistical analysis
- High throughput—up to 1,000 corrected readings/s via GPIB

**Price from (US) \$4,763**

### P-Series power meters (N1911A/12A)

Accurate, fast and repeatable power measurements for R&D and manufacturing environments.

- Ideal for aerospace/defense, wireless communications and wireless 802.11a/b/g networking
- Capture single-shot and repetitive events over a wide bandwidth with 30 MHz video bandwidth and 100 MSa/s, continuous sampling capability
- Comprehensive power, time, and statistical measurements

**Price from (US) \$7,516**

Model number	Number of channels	Frequency range	N8480 Series sensors	P-Series sensors	E-Series E9320 sensors	E-Series E9300 sensors	E-Series CW sensors	8480D Series sensors	Standard interfaces
E4417A	2	9 kHz to 110 GHz	-35 to +44 dBm	N/A	-65 to +20 dBm	-60 to +44 dBm	-70 to +20 dBm	-70 to -20 dBm	GPIB, RS-232
E4416A	1			N/A	-65 to +20 dBm				GPIB, RS-232
N1914A	2			N/A	N/A				GPIB, LAN, USB
N1913A	1			N/A	N/A				GPIB, LAN, USB
N1912A	2			-35 to +20 dBm	-65 to +20 dBm				GPIB, LAN, USB
N1911A	1			-35 to +20 dBm	-65 to +20 dBm				GPIB, LAN, USB

## Agilent power sensors

### *Stable, repeatable measurements for a wide variety of applications*

- **N8480 Series:** Thermocouple-based sensors offer exceptional accuracy and superior usability
  - Built-in EEPROM feature for ease of calibration factor retrieval
  - Widest dynamic range of 55 dB with thermocouple technology
  - Best-in-class linearity of less than 1%
  - Backward compatibility with EPM, EPM-P and P-Series power meters
- **8480 Series:** Average power sensors using diode (848xD Series) and thermocouple technology (8483A)
- **E-Series:** Includes E441x wide dynamic range CW sensors, E9300 wide dynamic range average power sensors, E9320 peak and average power sensors
- **P-Series:** Peak and average power measurements of wide-bandwidth modulated signals using diode technology

**Price from (US) \$1,291**



*Save bench space*

## Agilent U2000 Series USB average power sensors

### *Compact, lightweight power measurements without a power meter*

Save bench space, travel light up base stations and still make high-performance CW and average measurements.

- Connect directly to a PC or selected Agilent RF analyzers (see page 29 for more details)
- Simple setup via USB plug-and-play—no external power adapter needed
- Internal zeroing saves time and reduces sensor wear-and-tear
- Time-gated measurements and frequency sweep (except U2004A)
- Built-in attenuator improves mismatch (B&H models)
- Long-distance measurements using USB-to-LAN hubs
- Easy monitoring, testing and analysis with the N1918A power analysis manager software

**Price from (US) \$2,742**



Model	Frequency range	Power range	Connector type
<b>U2000A</b>	10 MHz to 18 GHz	-60 to +20 dBm	Type-N
<b>U2000B</b>	10 MHz to 18 GHz	-30 to +44 dBm	Type-N
<b>U2000H</b>	10 MHz to 18 GHz	-50 to +30 dBm	Type-N
<b>U2001A</b>	10 MHz to 6 GHz	-60 to +20 dBm	Type-N
<b>U2001B</b>	10 MHz to 6 GHz	-30 to +44 dBm	Type-N
<b>U2001H</b>	10 MHz to 6 GHz	-50 to +30 dBm	Type-N
<b>U2002A</b>	50 MHz to 24 GHz	-60 to +20 dBm	3.5 mm
<b>U2002H</b>	50 MHz to 24 GHz	-50 to +30 dBm	3.5 mm
<b>U2004A</b>	9 kHz to 6 GHz	-60 to +20 dBm	Type-N

## Agilent RF and microwave test accessories

*Over 200 accessories—the key to getting great performance, accuracy, and flexibility*

### Agilent J7211A/B/C attenuation control unit

*Simple, flexible operation for benchtop and ATE applications from DC to 26.5 GHz*

- 0 to 121/101 dB with 1 dB step size
- Guaranteed 0.03 dB RF repeatability per section
- Long operating life time (> 5 million cycles)
- Agilent calibrated data correction display
- GPIB, USB and LAN connectivity

**Price from (US) \$6,249**

J7211B



11713B

### Agilent 11713B/C switch driver

*Double the switch capacity with expanded connectivity*

- 8 plugs and 4 Viking connectors
- Outputs configured as 2 independent banks
- TTL control outputs (11713C only)
- Relay control voltages supported: 5, 15, 24, user-defined (11713C only)
- Multiple connectivity: GPIB, USB, LAN (LXI Class C compliance)
- Full backwards compatibility with Agilent 11713A

**Price from (US) \$2,778**

## Attenuators

*32 models for signal conditioning and control*

- Broad frequency range DC to 67 GHz
- Long operating life—5 million cycles
- RF repeatability 0.03 dB
- Average power: 1, 2, and 25 W



Model	Frequency range	Type	Attenuation	Price from (US)
<b>8490G</b>	DC to 67 GHz	Fixed	3, 6, 10, 20, 30, 40 dB	<b>\$840</b>
<b>8491A</b>	DC to 12.4 GHz	Fixed	3, 6, 10, 20, 30, 40, 50, 60 dB	<b>\$229</b>
<b>8494B</b>	DC to 18 GHz	Manual	0 to 11 dB, 1 dB steps	<b>\$1,508</b>
<b>8496B</b>	DC to 18 GHz	Manual	0 to 110 dB, 10 dB steps	<b>\$1,478</b>
<b>8494H</b>	DC to 18 GHz	Programmable	0 to 11 dB, 1 dB steps	<b>\$1,969</b>
<b>8496H</b>	DC to 18 GHz	Programmable	0 to 110 dB, 10 dB steps	<b>\$1,969</b>

## L-Series electromechanical switches

*Reliable, economical switching with low insertion loss*

- 0.03 dB insertion loss repeatability—guaranteed for 2 million cycles
- Operating life of 5 million cycles, typical
- Excellent isolation, typically >90 dB at 12 GHz



Model	Frequency range	Type	Connector	Price from (US)
<b>L7104A/B/C</b>	DC to 4/20/26.5 GHz	Terminated/ SP4T	SMA (f)	<b>\$1,034</b>
<b>L7106A/B/C</b>	DC to 4/20/26.5 GHz	Terminated/ SP6T	SMA (f)	<b>\$1,122</b>
<b>L7204A/B/C</b>	DC to 4/20/26.5 GHz	Unterminated/ SP4T	SMA (f)	<b>\$837</b>
<b>L7206A/B/C</b>	DC to 4/20/26.5 GHz	Unterminated/ SP6T	SMA (f)	<b>\$1,003</b>
<b>L7222C</b>	DC to 26.5 GHz	Transfer	SMA (f)	<b>\$837</b>



## U8903A audio analyzer

### Make an audible difference

Across the audio spectrum and beyond, this scalable, single-unit solution provides versatile measurement functions, diverse test signals, and powerful analysis capabilities.

- Select generator analyzer, graph and sweep modes with one-button access
- Characterize signal-to-noise ratio, SINAD, IMD, DFD, THD+N ratio, THD+N level, crosstalk, and more
- -101 dB analyzer residual distortion + noise at 20 Hz to 20 kHz
- 5 ppm frequency accuracy for generator and analyzer
- $\pm 1\%$  amplitude accuracy for generator and analyzer
- Connect to a PC through GPIB, LAN/LXI-C, and USB interfaces

**Price from (US) \$12,804**



## N9311X RF and microwave accessories

### For low-cost benchtop and handheld analyzers

These accessories complement Agilent's low-cost handheld and benchtop solutions (N9330B, N9340B, N9310A, N9320B, N1996A, and N9000A), providing you with a complete family of solutions for your measurement needs.

- Antenna: 5 models (N9311X-500/501/504/508/518) ranging from 70 MHz to 18 GHz, retractable, directional, and omni-directional
- Bandpass filters: 5 models (N9311X-550/551/552/553/554) covering all major cellular frequencies (814 to 1990 MHz)
- Adapters: 7 models (N9311X-540/541/542/543/544/545/546) Type-N(f) to SMA(m), BNC(m), 7/16 DIN(f) and N(f), and Type-N(m) to SMA(f) and BNC(f)
- Cables: 4 models (N9311X-580/581/582/583) N, SMA, BNC type connectors, lengths up to 3 m
- Attenuators: 3 models (N9311X-560/561/562) ranging from 10 to 100 W average power with 40 dB attenuation

**Price from (US) \$1,770**



See  
pages 32-35  
for  
signal analyzers  
and signal  
generators

## Do more out there with Agilent's field-rugged handheld RF tools

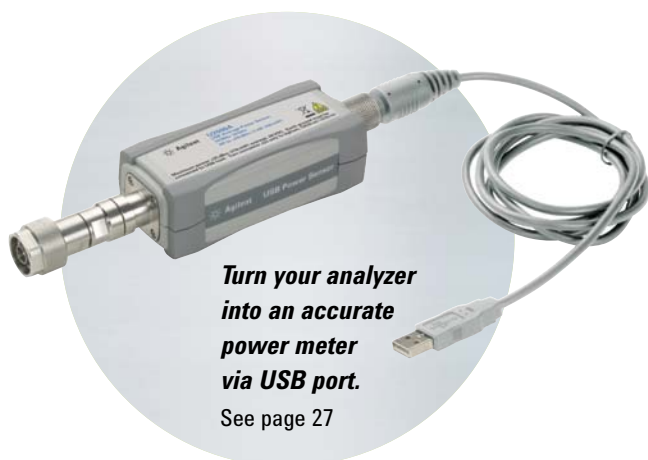


### N9330B handheld cable and antenna tester

#### Essential tests for RF installation and maintenance

- 25 to 4000 MHz handheld cable & antenna tester
- Measure SWR/return loss/cable loss, and distance-to-fault (DTF)
- Calibrate with the electronic calibrator for fast and hassle-free calibration
- Make high-accuracy power measurement with Agilent U2000 Series USB power sensor
- Start up and sweep quickly
- Export data easily via the USB port

**Price from (US) \$6,485**



**Turn your analyzer  
into an accurate  
power meter  
via USB port.**

See page 27



### N9340B handheld spectrum analyzers

#### Best-in-class performance and features

- 100 kHz to 3 GHz (tunable to 9 kHz) handheld spectrum analyzer with best-in-class specifications
- One-button measurement (channel power, ACPR, OBW, field strength, spectrum emission mask)
- Scalar network analysis: insertion loss, amplifier gain, filter passband (option TG3)
- Interference analysis with spectrogram and N9311X-504 directional antenna
- Demodulation (AM/FM, ASK/FSK)
- High-accuracy power measurement with Agilent U2000 Series USB power sensor
- Industrial applications: HD radio (AM/FM IBOC) and xDSL
- Flexible remote control and monitoring capability via LAN and USB
- Rugged design for field use

**Price from (US) \$7,987**

## N9912A FieldFox RF analyzer

### *Up to six instruments in one rugged package*

- Cable and antenna analyzer: 2 MHz to 4 GHz (optional 6 GHz); directivity > 42 dB, 1.5 ms per point
- Spectrum analyzer: 100 kHz to 4 GHz (optional 6 GHz); DANL: -148 dBm, 1 sec/full span (6 GHz)
- Interference analyzer: Spectrogram and 3D waterfall display, record/playback trace data
- Network analyzer: 2 MHz to 4 GHz (optional 6 GHz); S11 magnitude and phase, S21 magnitude
- Power meter: 9 kHz to 24 GHz (for use with U2000 Series USB power sensors)
- Vector voltmeter: 2 MHz to 4 GHz (optional 6 GHz); easily compare phase and electrical length
- Lightweight and rugged with 4-hour battery life

**Price from (US) \$7,614**



## N9923A FieldFox RF vector network analyzer, 4/6 GHz

### *World's most accurate handheld vector network analyzer*

- Full 2-port error corrected network analysis, S11, S21, S12, S22, with both magnitude and phase
- Cable and antenna test (distance to fault, return loss, etc.)
- Cable loss measurement (1-port)
- Insertion loss and transmission measurement (2-port)
- Smith chart and polar display
- Vector voltmeter (1- and 2-channel)
- Power meter with external USB power sensor

**Price from (US) \$12,000**



Order  
any one of the  
Agilent handheld  
RF analyzers and  
receive 3 FREE  
power travel  
accessories

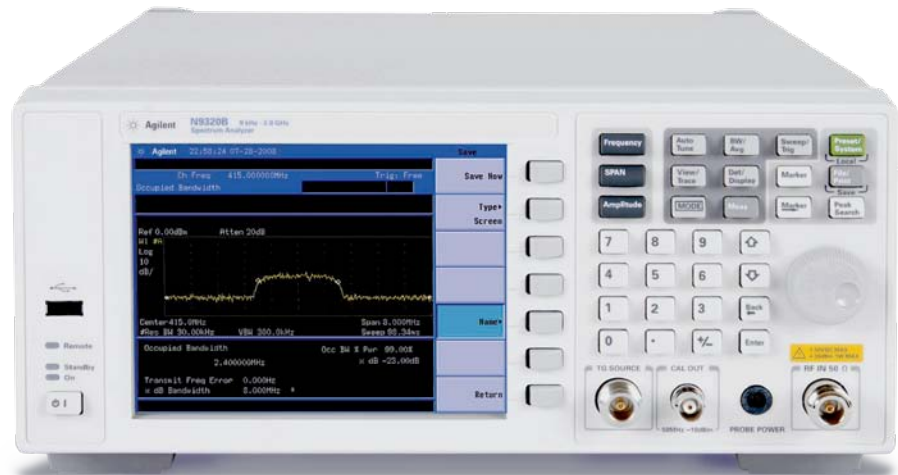
## N9320B spectrum analyzer

*Professional performance, compact size and unbeatable value*

Now get improved measurement reliability and new features to make your job easier with the N9320B, the optimized basic spectrum analyzer for effective and accurate measurements.

- Frequency range: 9 kHz to 3 GHz
- Optional tracking generator: 100 kHz to 3 GHz
- Optional AM/FM and ASK/FSK demodulation
- Optional EMC RBW filters (-6 dB)
- USB, LAN, GPIB connectivity; USB power sensor support
- Remote control PC software

**Price from (US) \$7,871**



## N1996A Agilent CSA spectrum analyzers (3, 6 GHz models)

*Price, performance, portability... perfect*

The N1996A combines low price, great performance, and a highly portable design that takes quality measurements anywhere, anytime.

- Best-in-class dynamic range with +18 dBm TOI
- Enhanced channel power measurements for radio standards analysis
- Built-in VSWR bridge and powerful stimulus/response measurements
- 2 hours of continuous battery operation

**Price from (US) \$9,565**



## Agilent ESA spectrum analyzers (3, 6.7, 13.2, 26.5 GHz models)

*General purpose spectrum analyzers defined by simplicity and flexibility*

- Speed, accuracy, and dynamic range to give you confidence in your measurement results: DANL: 120 dBm (up to -166 dBm with preamp and additional options)
- Firmware features and functions in an upgradable platform
- Proven performance and fast warm-up time

**Price from (US) \$23,710**



Customers who need a faster analyzer for the manufacturing line, or connectivity to LAN/USB in addition to GPIB, or want to do in-depth signal analysis with 896000 VSA software will benefit from the new X-Series signal analyzers.



## X-Series analyzers

*An evolutionary approach to signal analysis that spans instrumentation, measurements, and software*

- Advanced signal analysis user interface: All measurement features and functions are intuitively grouped and accessible from the front panel or via a USB keyboard and mouse
- Open Windows® XP Professional operating system
- LXI class C compliant

### N9010A EXA signal analyzer (3.6, 7, 13.6 26.5 GHz models)

*Make every millisecond count*

- Up to 300% faster than other economy class spectrum and signal analyzers
- 10 MHz (standard), 25 MHz (optional) analysis bandwidth
- DANL: -150 dBm/Hz, absolute amplitude accuracy: 0.3 dB

**Price from (US) \$17,009**



### N9000A CXA signal analyzer (3.0, 7.5 GHz)

*Low-cost versatility for essential signal characterization*

- DANL: -142 dBm (-157 dBm with preamp), absolute accuracy:  $\pm 0.5$  dB (95% conf.)
- Optional EMI pre-compliance measurement capability
- Programming remote language compatibility with ESA and other X-Series
- GPIB, USB 2.0, LAN standard

**Price from (US) \$ 12,657**



## Applications for X-Series signal analyzers

Agilent X-Series measurement applications enable you to investigate, characterize, and troubleshoot your cellular, wireless connectivity/networking, digital video, and general purpose designs.

- Install at time of instrument purchase or order as a standalone to upgrade an existing instrument
- One button, standard-based power measurements (channel power, ACP, SEM, etc..) with pass/fail tests
- Standard-based modulation quality measurements (such as EVM, frequency error, reference signal TX power (RSTP), OFDM symbol transmit power (OSTP) etc...)
- X-Series front-panel operation with SCPI programmability

EXA-Compatible Applications	X measurement application	Price from (US)
LTE FDD Measurement Application	N9080A	<b>\$12,842</b>
802.16 OFDMA Measurement Application	N9075A	<b>\$10,659</b>
W-CDMA / HSPA Measurement Application	N9073A	<b>\$7,905</b>
iDEN / WiDEN / MotoTalk Measurement Application	N6149A	<b>\$8,764</b>
DVB-T/H Measurement Application	N6153A	<b>\$7,606</b>
ISDB-T Measurement Application	N6155A	<b>\$8,248</b>
DTMB Measurement Application	N6156A	<b>\$7,506</b>
CMMB Measurement Application	N6158A	<b>\$8,248</b>
Pulse Measurement Software	N9051A	<b>\$4,072</b>
Remote Language Compatibility Application for 856xE/EC, 8566/68	N9061A	<b>\$217</b>
Analog Demodulation Measurement Application	N9063A	<b>\$3,204</b>
Phase Noise Measurement Application	N9068A	<b>\$5,020</b>
Noise Figure Measurement Application	N9069A	<b>\$7,477</b>
GSM/EDGE Measurement Application	N9071A	<b>\$5,131</b>
cdma2000 Measurement Application	N9072A	<b>\$6,238</b>
Single Acquisition Combined Fixed WiMAX™ Measurement Application	N9074A	<b>\$6,495</b>
1xEV-DO Measurement Application	N9076A	<b>\$8,530</b>
Single Acquisition Combined WLAN Measurement Application	N9077A	<b>\$7,629</b>
TD-SCDMA Measurement Application	N9079A	<b>\$7,477</b>
MATLAB® Software for X-Series and PSA	N6171A	<b>\$2,947</b>
Dual, EXA/CXA-Compatible Applications	X measurement application	Price from (US)
Analog Demodulation Measurement Application	N9063A/W9063A*	<b>\$3,204</b>
Phase Noise Measurement Application	N9068A/W9068A*	<b>\$5,020</b>
Noise Figure Measurement Application	N9069A/W9069A*	<b>\$7,477</b>
Agilent VXA Signal Analyzer Measurement Application—Basic VSA-lite	89601X-205	<b>\$4,922</b>
VXA X-Series Analyzer Connectivity	89601X-333	<b>\$1,096</b>
VXA Vector Modulation Analysis	89601X-AYA	<b>\$4,874</b>
VXA WLAN Modulation Analysis	89601X-B7R	<b>\$4,557</b>

\*CXA option is at a slightly lower price

## Signal generators

### From basic to advanced functionality

Each signal generator delivers benchmark performance in its class to address your test requirements in design and manufacturing.

	Analog signal generators				Vector signal generators	
	N9310A	N5181A	E4428C	N5183A	N5182A	E4438C
Maximum frequency	3 GHz	6 GHz	6 GHz	40 GHz	6 GHz	6 GHz
Minimum frequency	9 kHz	100 kHz	250 kHz	100 kHz	100 kHz	250 kHz
Maximum output power	+13 dBm	+23 dBm	+17 dBm	+18 dBm	+23 dBm	+17 dBm
Minimum output power	-127 dBm	-127 dBm	-136 dBm	-90 dBm	-127 dBm	-136 dBm
Phase noise at 1 GHz (20 kHz offset) typical	-95 dBc/Hz	-121 dBc/Hz	-134 dBc/Hz	-116 dBc/Hz	-121 dBc/Hz	-134 dBc/Hz
Frequency switching speed	< 10 ms	< 900 $\mu$ s	< 9 ms	< 900 $\mu$ s	< 900 $\mu$ s	< 9 ms
AM, FM, PM, pulse	X	X	X	X	X	X
I/Q baseband generator	X				100 MHz bandwidth, 64 MSa, I/Q waveforms	80 MHz bandwidth, 64 MSa, I/Q waveforms, real-time I/Q, digital input and output
Additional modulation					ASK, FSK, MSK, PSK, QAM, AWGN, multitone, NPR, phase noise impairment	ASK, FSK, MSK, PSK, QAM, AWGN, multitone, NPR, jitter injection
Cellular and wireless connectivity					X	X
Audio/Video broadcasting					X	X
Detection, positioning, tracking, and navigation						X
Price from (US)	\$7,560	\$9,809	\$20,904	\$25,505	\$22,633	\$37,886

Signal Studio software

## N9310A signal generator

### Capability, reliability and affordability for generating CW and modulated RF signals

- Ideal for benchtop R&D, education, field measurements, and signal monitoring and manufacturing
- Rugged body, lightweight frame, large display and full-size front panel
- Standard USB connectivity for test automation and memory stick support
- 9 kHz to 3 GHz frequency coverage with 0.1 Hz resolution
- Extensive analog modulation: AM, FM, phase, and pulse modulation
- Wide bandwidth (40 MHz) IQ modulator for generating digital modulated signals from your own custom IQ signals



## Agilent MXG signal generators

*Designed for the most demanding manufacturing and R&D testing*

### N5181A MXG RF analog signal generator

- Accurate and repeatable output power for calibration and verification
- High output power to compensate for system losses or drive device into compression
- Fast switching speeds to increase throughput  $\leq 1.2$  ms in SCPI mode and  $\leq 900$   $\mu$ s simultaneous frequency, and amplitude in list mode
- Low phase and broadband noise for VCO substitution

### N5182A MXG RF vector signal generator

- Create reference signals for LTE, W-CDMA, GSM, cdma2000®, WiMAX™, WLAN, DVB, and more with Signal Studio software
- Internal baseband generator with 100 MHz RF BW
- High output power to drive device into compression without compromising ACP or EVM measurements
- Industries best linearity to characterize true device performance (-73 dBc ACLR at +5 dBm for 1 carrier W-CDMA)



### N5183A MXG microwave analog signal generator

- Delivers the performance you need for broadband component manufacturing up to 40 GHz
- $\leq 900$   $\mu$ s frequency switching speeds
- Fast frequency and amplitude switching speeds along with excellent power and level accuracy

## Agilent ESG signal generators

*Excellent all-inclusive RF and modulation performance for your general-purpose test needs*

### E4428C ESG RF analog signal generator

- Outstanding level accuracy and output power for all general-purpose test needs
- Excellent spectral purity for LO substitution and interference testing
- Basic modulation for receiver and component tests requiring AM, QM, FM, and pulse modulation in the cellular, ISM, and UNII frequency bands

### E4438C ESG RF vector signal generator

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