Agilent 34405A Digital Multimeter

the feature-rich DMM with unbeatable values

Agilent Technologies
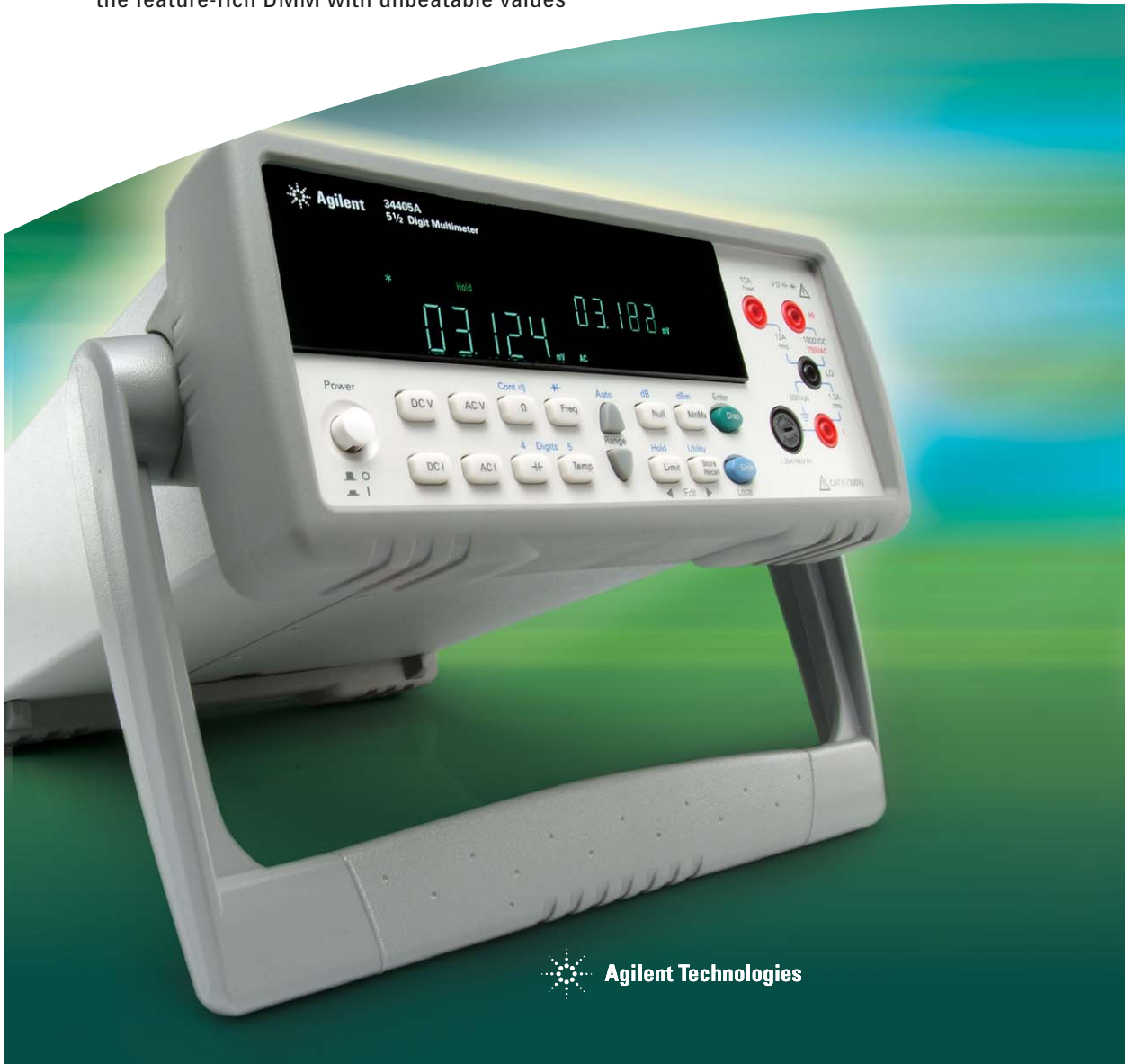
True Capability and Reliability

Affordable yet feature rich, the Agilent 34405A 5.5 digit digital multimeter comes with true capability and reliability for your demanding test and measurement applications.

The 34405A is designed beyond meeting general industrial needs, covering voltage, current, resistance, frequency, diode test and continuity measurements. Its true value is more evident in its capability to 'stretch' temperature and capacitance measurements for better coverage over broader applications. Not only that, you can perform more efficient and accurate measurements with its built-in math functions.

With the 34405A, your measurements are made fast, easy and more convenient. Perform quick setup and remote control with the USB 2.0 (TMC-488.2 compliant) interface. Take two readings simultaneously from the same signal for better visibility and troubleshooting, leading to high throughput and productivity. Connect the 34405A to your PC, for 'unlimited' storage to capture intermittent signals and more flexibility in measurement configuration and data manipulation. You can also store/recall complete instrument setups to further save test time.

Designed to stringent quality controls and backed by a leading service and support team, the 34405A is your ideal instrument that's truly capable and reliable across a broad range of industries—be it R&D, design and validation, manufacturing or education.

Features

- 120,000 counts resolution
- 16 built-in measurement functions, including temperature and capacitance
- 6 built-in math functions: Null, dBm, dB, MinMax, Limit and Hold
- Up to 70 readings per second
- 0.025% DC voltage accuracy
- USB 2.0 interface (TMC-488.2 compliant)
- SCPI compatible
- Comes with Agilent IO Library Suite, DMM Intuilink connectivity software, and IVI-COM and LabVIEW[1] drivers
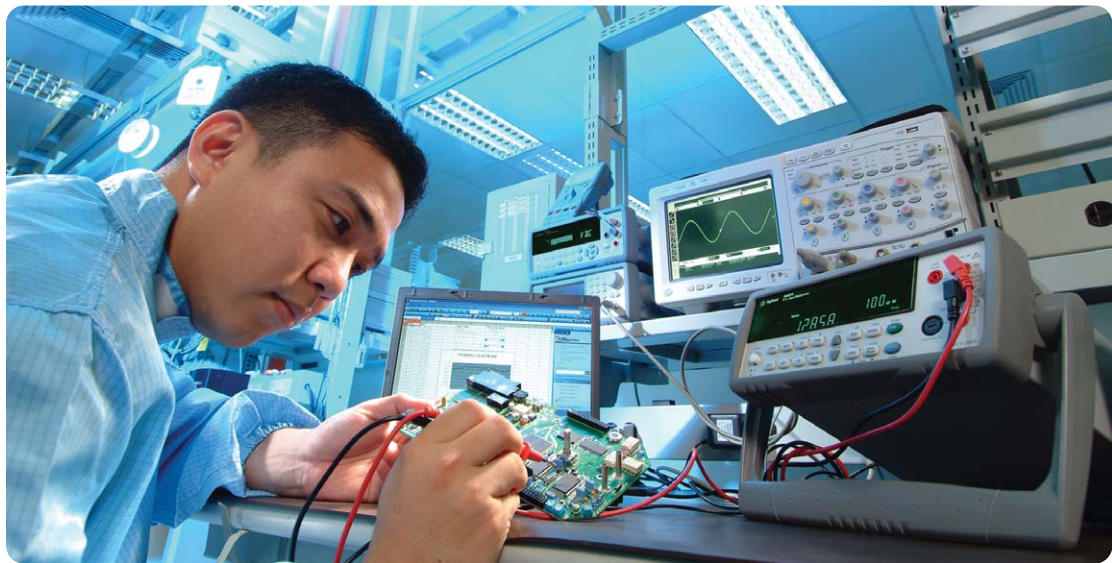
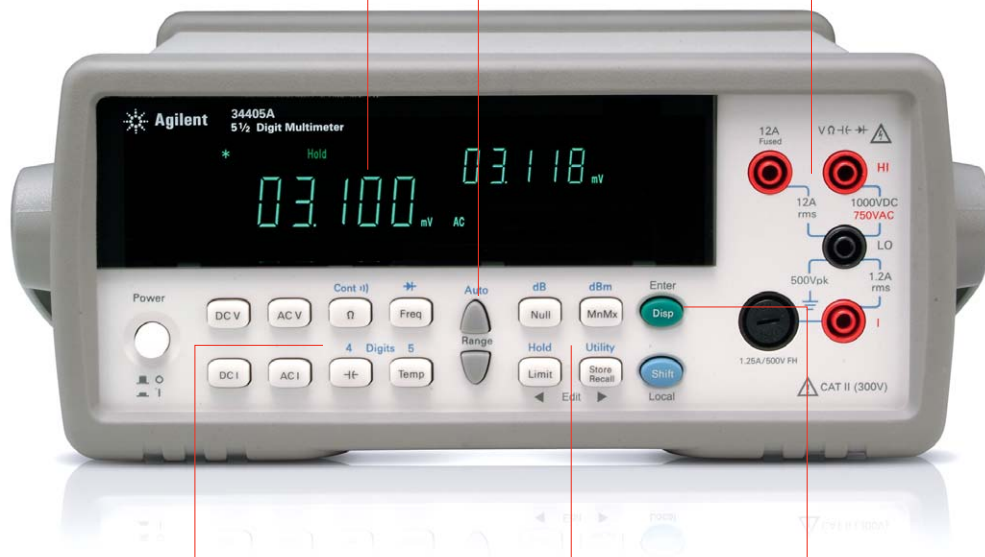# More Features, Uncompromised Quality

Use the Up-Down keys to select the desired measurement range. Just press Shift ▸ Auto key to switch measurement range automatically.

5.5 digit dual display increases productivity and throughput in troubleshooting.

Connect the supplied test loads to the input terminals to start you measurements.

Superior value with a broad range of functions, including temperature and capacitance measurements.

Select secondary display measurements.

Math functions and utility menu that allow users to take reference measurements (ie. Min/Max value, etc.) and store measurement setups from the front panel.

Ideal for Your Applications

Designed for educators

The 34405A is designed with today's educators in mind. It is programmable with LabVIEW[1], making it easy for integration into your existing system. It is not only affordable, but also built for robustness that insures your investment over the years to come.

34405A's robust build and easy integration into existing systems make it ideal for today's research and teaching lab environments.

"Real capabilities don't come with a big price tag"

Works well in manufacturing environments

The 34405A is a perfect fit for the robust manufacturing industry as it is small, rack-mountable and rugged with its shock-absorbing bumpers. It is remote-controllable with industry-standard SCPI commands so you can conveniently configure your measurements from a distance. Save setup and configuration time of your instrument with USB connectivity. With its dual display feature, take two readings simultaneously from the same signal. Not only that, get accurate measurements (up to 70 readings per second) so you can make timely decisions for your high volume.

Make quick and accurate measurements without instrument setup or configuration hassle
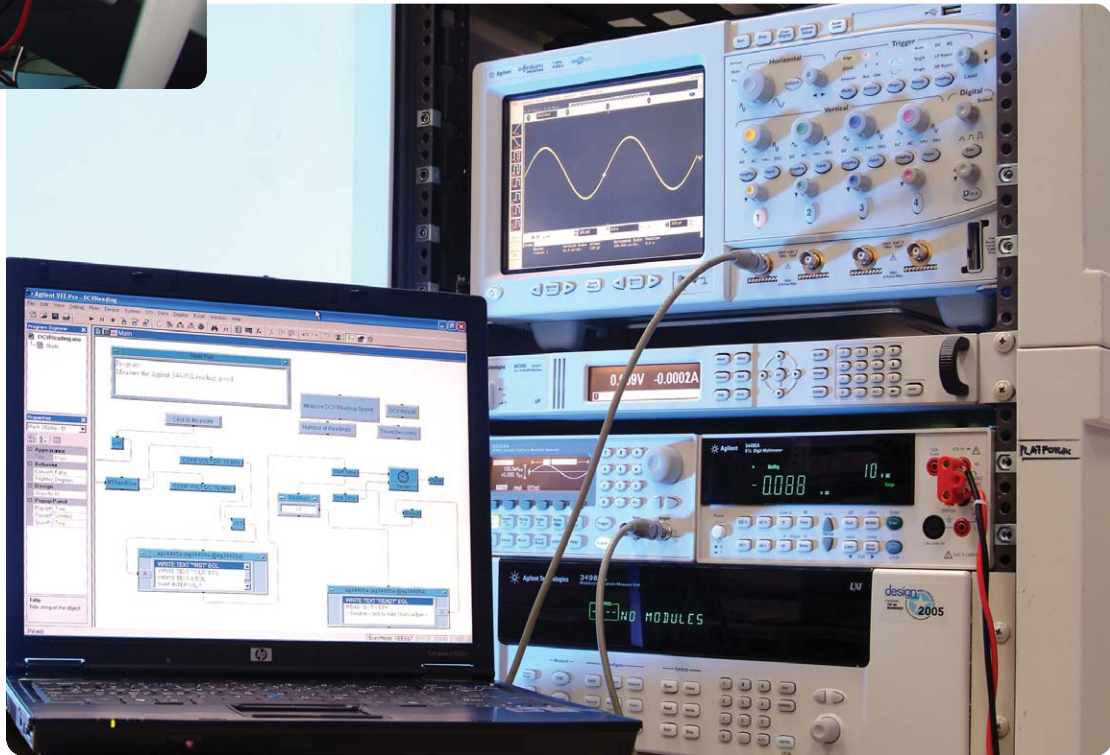
Ideal for Your Applications
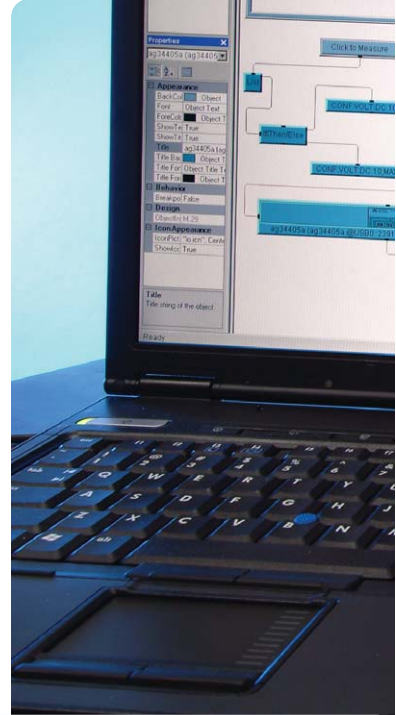
Quick connect to PC with built-in USB 2.0 interface

The 34405A's built-in USB 2.0 interface enables quick and easy connection to the PC with its USB interface, which is auto-detectable by the bundled award-winning Agilent IO Library Suite. Hence, you can save unnecessary setup time and perform your tests sooner. Its PC-connect capability allows you to remotely control the instrument with industry-standard SCPI commands.

USB 2.0 interface makes the 34405A hot-swappable and auto-detectable, saving setup and configuration time.

An advocate of Agilent Open, the 34405A opens up to flexibility and customer convenience via system-ready instrumentation.

Flexibility to work seamlessly with most software environments

The 34405A is a member of the Agilent Open, providing flexibility for seamless integration into a test system. For easy integration with different programming environments, the 34405A is shipped with the Agilent IO Library Suite, LabVIEW[1] driver and IVI-COM driver.


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Ideal for Your Applications

Data logging setup in minutes with bundled Intuilink

The 34405A is the only instrument in its class that comes with an easy-to-use software—the ideal complement to customer's measurement needs. The DMM Intuilink connectivity software is able to connect to the 34405A and data log directly from it through the USB port. Intuilink also gives users the flexibility to configure tests and export data for detailed analysis.

Set the interval or duration for your measurement
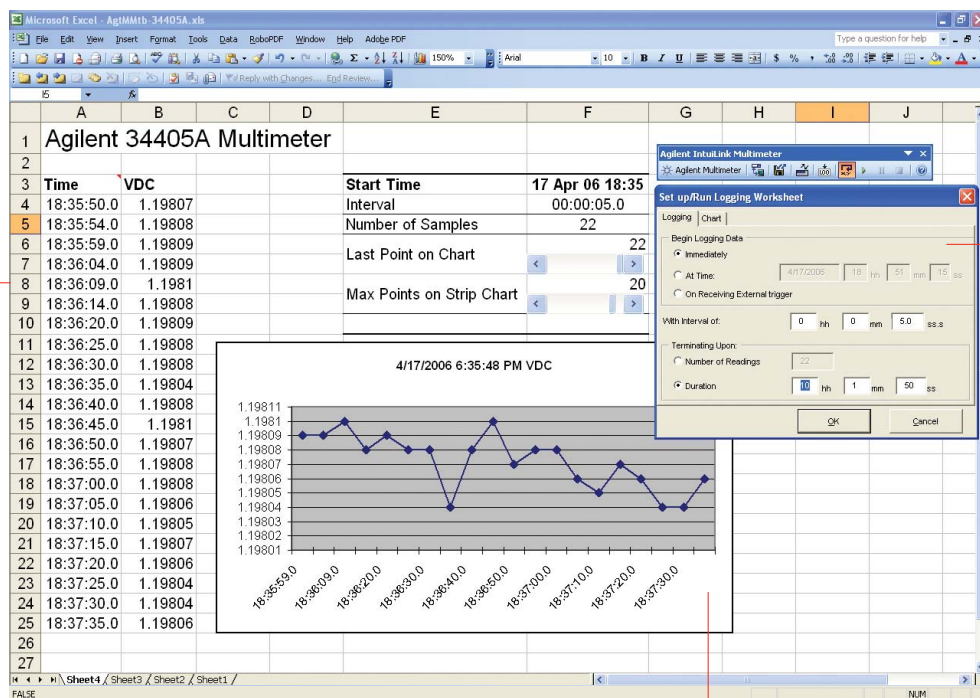
Trend plot helps you analyze your results

View your measurements easily in table format

The step-by-step guide on using Intuilink with the 34405A is available at www.agilent.com/find/34405A in the FAQ section. It answers the question, "How can I start using the software provided for data logging with the 34405A multimeter?"

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Specifications[2]

Display	VFD
Resolution	5.5 digits
Operating specifications	
DCV, DCI	70 readings/s
ACV, ACI	2.5 readings/s
Frequency	9 readings/s
DC specifications	
DCV	
Range	100 mV – 1000 V
Accuracy	0.025%
DCI	
Range	10 mA – 10 A
Accuracy	0.05%
Resistance	
Range	100 Ω – 100 MΩ
Accuracy	0.05%
Continuity / Diode test	Yes
AC specifications	
True RMS ACV	
Range	100 mV – 750 V
Accuracy	0.2%
True RMS ACI	
Range	10 mA – 10 A
Accuracy	0.5%
Frequency	
Range	300 kHz
Accuracy	0.02%

Temperature measurement range	– 80 °C to 150 °C
Capacitance measurement range	1 nF – 10,000 µF
Math functions	
Null	Yes
Hold	Yes
Min/Max/Average	Yes
dB/dBm	Yes
Limit test	Yes
Remote control	
Interface	USB 2.0 (TMC-488.2)
Programming language	SCPI, IEEE-488.1, IEEE-488.2
Software	Intuilink, Agilent IO Library Suite
Drivers	LabVIEW[1], IVI-COM
General	
Weight	3.75 kg
Size x 303.2 mm	103.8 mm x 261.1 mm
Safety	Certified by CSA for IEC/EN/CSA/UL 61010-1 2nd Edition CAT I 1000 V, CAT II 300 V
Warranty	One year

Standard Shipped Components

- Test lead kit
- Test report
- Power cord
- USB interface cable
- Quick Start Guide
- User's and Service Guide
- Product Reference CD-ROM
- Agilent IO Library Suite CD-ROM

Optional Accessories

34132A Deluxe Test Lead Kits

34133A Precision Electronics Test Leads

E2308A Thermistor Probe

34330A 30A Current Shunt

Measurement Automation—Quick and Easy

Whatever instrument you're programming—a power supply, power meter or data acquisition device, whether distributed or local—Agilent VEE graphical language software and I/O hardware provide you the ease and flexibility to set up and automate the way you want for your application need. Make measurements quickly, easily—and affordably—today.

Measurement automation program in Agilent VEE and Agilent I/O hardware

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Instruments

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view online demo	www.agilent.com/find/34405A_demo
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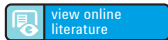
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and global support, which are
combined to more easily integrate
test system development.

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