Truevolt DMMs: 34460A, 34461A, 34465A, 34470A

Keysight's Truevolt DMMs offer a full range of measurement capabilities and price points in both 6½ and 7½ digit models

The 34465A and 34470A also offer higher levels of accuracy, speed, and resolution. Measure your signals with confidence.





You can measure your real-world signals with confidence



All Truevolt DMM specifications are tested and guaranteed for compliance with ISO/IEC 17025 standards so you can prove the effectiveness of your lab or production line's quality management system. Many lower-cost DMMs in this class do not carry a guarantee of their measurement specifications.

Key features and benefits of 34465A/70A

Get more insight quickly: Truevolt DMM's graphical capabilities such as trend and histogram charts offer more insights quickly. Both models also provide a data logging mode for easier trend analysis and a digitizing mode for capturing transients.

Measure low-power devices: The ability to measure very low current, 1 μ A range with pA resolution, allows you to make measurements on very low power devices.

Maintain calibrated measurements: Auto calibration allows you to compensate for temperature drift so you can maintain measurement accuracy throughout your workday.accessories ensure maximum accuracy.

Key characteristics of 34465A/70A

- Resolutions up to 7½ digits
- Reading rates up to 50,000 readings/s
- Memory up to 2 million readings
- Voltage ranges from 100 mV to 1,000 V
- Current ranges from 1 µA to 10 A
- USB and LAN interfaces, optional GPIB
- BenchVue software included



Key specificationsDigits of resolution $6\frac{1}{2}$ $6\frac{1}{2}$ $6\frac{1}{2}$ $7\frac{1}{2}$ 1 year DCV accuracy75 ppm35 ppm30 ppm16 ppmMax reading rate 300 rdgs/s $50,000 \text{ rdgs/s}$ $50,000 \text{ rdgs/s}$ Memory $1,000 \text{ rdgs}$ $50,000 \text{ rdgs std}$ 2 million rdgs opt $50,000 \text{ rdgs std}$ 2 million rdgs optMeasurements $200 \text{ mV to } 1,000 \text{ V}$ $200 \text{ mV to } 1,000 \text{ V}$ $100 \text{ mV to } 1,000 \text{ V}$ $100 \text{ mV to } 1,000 \text{ V}$ DCV, ACV $100 \text{ mV to } 1,000 \text{ V}$ DCI $100 \text{ µA to } 3 \text{ A}$ $100 \text{ µA to } 10 \text{ A}$ $1 \text{ µA to } 10 \text{ A}$ $1 \text{ µA to } 10 \text{ A}$ ACI $100 \text{ µA to } 3 \text{ A}$ $100 \text{ µA to } 10 \text{ A}$ $100 \text{ µA to } 10 \text{ A}$ $100 \text{ µA to } 10 \text{ A}$ 2 - and 4 -wire resistance $100 \text{ Q to } 100 \text{ M}\Omega$ $100 \text{ Q to } 1,000 \text{ M}\Omega$ $100 \text{ Q to } 1,000 \text{ M}\Omega$ $100 \text{ Q to } 1,000 \text{ M}\Omega$ Continuity, diode Y , 5 V Frequency, period $3 \text{ Hz to } 300 \text{ kHz}$ TemperatureRTD/PT100, thermistorRTD/PT100, thermistor, thermisto	Features	34460A	34461A	34465A	34470A
Digits of resolution 6½ 6½ 6½ 7½ 1 year DCV accuracy 75 ppm 35 ppm 30 ppm 16 ppm Max reading rate 300 rdgs/s 1,000 rdgs/s 50,000 rdgs/s 50,000 rdgs std Memory 1,000 rdgs 10,000 rdgs 50,000 rdgs std 2 million rdgs opt Measurements DCV, ACV 100 mV to 1,000 V 100 mV to 1,000 V 100 mV to 1,000 V DCI 100 μA to 3 A 100 μA to 10 A 1 μA to 10 A 1 μA to 10 A ACI 100 μA to 3 A 100 μA to 10 A 100 μA to 10 A 100 μA to 10 A 2- and 4-wire resistance 100 Ω to 100 MΩ 100 Ω to 100 MΩ 100 Ω to 1,000 MΩ 100 Ω to 1,000 MΩ Continuity, diode Y, 5 V Y, 5 V Y, 5 V Y, 5 V Frequency, period 3 Hz to 300 kHz Temperature RTD/PT100, thermistor RTD/PT100, thermistor RTD/PT100, thermistor RTD/PT100, thermistor RTD/PT100, thermistor Thermicocouples Capacitance 1.0 nF to		3440UA	34401A	34403A	34470A
1 year DCV accuracy 75 ppm 35 ppm 30 ppm 16 ppm Max reading rate 300 rdgs/s 1,000 rdgs/s 50,000 rdgs/s 50,000 rdgs/s Memory 1,000 rdgs 10,000 rdgs 50,000 rdgs std 2 million rdgs opt 2 million rdgs opt Measurements DCV, ACV 100 mV to 1,000 V 100 mV to 1,000 MΩ 100 mV to 1,000 MΩ 100 mV to 1,000 MΩ </td <td>7 1</td> <td>047</td> <td>24/</td> <td>047</td> <td></td>	7 1	047	24/	047	
Max reading rate 300 rdgs/s 1,000 rdgs/s 50,000 rdgs/s 50,000 rdgs/s Memory 1,000 rdgs 10,000 rdgs 50,000 rdgs std 2 million rdgs opt 2 million rdgs opt Measurements DCV, ACV 100 mV to 1,000 V DCI 100 μA to 3 A 100 μA to 10 A 1 μA to 10 A 1 μA to 10 A ACI 100 μA to 3 A 100 μA to 10 A 100 μA to 10 A 100 μA to 10 A 2- and 4-wire resistance 100 Ω to 100 MΩ 100 Ω to 100 MΩ 100 Ω to 1,000 MΩ 100 Ω to 1,000 MΩ Continuity, diode Y, 5 V Frequency, period 3 Hz to 300 kHz 3 Hz to 300 kHz <td></td> <td></td> <td></td> <td></td> <td></td>					
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DCV, ACV100 mV to 1,000 V100 mV to 1,000 V100 mV to 1,000 V100 mV to 1,000 VDCI100 μA to 3 A100 μA to 10 A1 μA to 10 A1 μA to 10 AACI100 μA to 3 A100 μA to 10 A100 μA to 10 A100 μA to 10 A2- and 4-wire resistance100 Ω to 100 Ω 100 Ω to 100 Ω 100 Ω to 10,000 Ω 100 Ω to 1,000 Ω Continuity, diodeY, 5 VY, 5 VY, 5 VY, 5 VFrequency, period3 Hz to 300 kHz3 Hz to 300 kHz3 Hz to 300 kHz3 Hz to 300 kHzTemperatureRTD/PT100, thermistorRTD/PT100, thermistor, thermistor, thermocouplesRTD/PT100, thermistor, thermistor, thermocouplesCapacitance1.0 nF to 100.0 μF1.0 nF to 100.0 μF1.0 nF to 100.0 μF1.0 nF to 100.0 μFDual line displayYesYesYesYesDisplayColor, graphicalColor, graphicalColor, graphicalColor, graphicalStatistical graphicsHistogram, bar chart trend chartHistogram, bar chart, trend chartRear input terminalsNoYesYesYes	Memory	1,000 rdgs	10,000 rdgs		
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2- and 4-wire resistance 100Ω to $100 M\Omega$ 100Ω to $100 M\Omega$ 100Ω to $1,000 M\Omega$ 100Ω to $1,000 M\Omega$ Continuity, diodeY, 5 VY, 5 VY, 5 VY, 5 VFrequency, period3 Hz to 300 kHz 3 Hz to 300 kHz 3 Hz to 300 kHz 3 Hz to 300 kHz TemperatureRTD/PT100, thermistorRTD/PT100, thermistorRTD/PT100, thermistor, thermocouplesCapacitance 1.0 nF to 100.0 μF Dual line displayYesYesYesYesYesDisplayColor, graphicalColor, graphicalColor, graphicalColor, graphicalColor, graphicalColor, graphicalStatistical graphicsHistogram, bar chart, trend chartHistogram, bar chart, trend chartRear input terminalsNoYesYesYesYesUSBYesYesYesYesYes Yes Yes	DCI	100 μA to 3 A	100 μA to 10 A	1 μA to 10 A	1 μA to 10 A
Continuity, diodeY, 5 VY, 5 VY, 5 VY, 5 VFrequency, period3 Hz to 300 kHz3 Hz to 300 kHz3 Hz to 300 kHz3 Hz to 300 kHzTemperatureRTD/PT100, thermistorRTD/PT100, thermistorRTD/PT100, thermistor, thermocouplesCapacitance1.0 nF to 100.0 μF1.0 nF to 100.0 μF1.0 nF to 100.0 μFDual line displayYesYesYesDisplayColor, graphicalColor, graphicalColor, graphicalColor, graphicalStatistical graphicsHistogram, bar chart, trend chartHistogram, bar chart, trend chartRear input terminalsNoYesYesYesUSBYesYesYesYesLAN/LXI CoreOptionalYesYesYes	ACI	100 μA to 3 A	100 μA to 10 A	100 μA to 10 A	100 μA to 10 A
Frequency, period 3 Hz to 300 kHz Temperature RTD/PT100, thermistor thermistor, thermistor, thermocouples Capacitance 1.0 nF to 100.0 μF Dual line display Yes Yes Yes Yes Display Color, graphical Color, graphical Color, graphical Color, graphical Statistical graphics Histogram, bar chart trend chart trend chart trend chart trend chart trend chart Rear input terminals No Yes Yes Yes Yes Yes Yes Yes Yes Ye	2- and 4-wire resistance	100 Ω to 100 M Ω	100 Ω to 100 M Ω	100 Ω to 1,000 M Ω	100 Ω to 1,000 M Ω
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thermistor thermistor thermistor thermistor, thermocouples Capacitance 1.0 nF to 100.0 μF 1.0 nF to 100.0	Frequency, period	3 Hz to 300 kHz	3 Hz to 300 kHz	3 Hz to 300 kHz	3 Hz to 300 kHz
Capacitance1.0 nF to 100.0 μF1.0 nF to 100.0 μF1.0 nF to 100.0 μF1.0 nF to 100.0 μF1.0 nF to 100.0 μFDual line displayYesYesYesYesDisplayColor, graphicalColor, graphicalColor, graphicalColor, graphicalStatistical graphicsHistogram, bar chart trend chartHistogram, bar chart, trend chartRear input terminalsNoYesYesYesIO interfaceUSBYesYesYesYesLAN/LXI CoreOptionalYesYesYes	Temperature		,		,
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Display Color, graphical Color, graphical Color, graphical Color, graphical Color, graphical Statistical graphics Histogram, bar chart trend chart Histogram, bar chart, trend chart Histogram, bar chart, trend chart Histogram, bar chart, trend chart Histogram, bar chart, trend chart Rear input terminals No Yes Yes Yes IO interface USB Yes Yes Yes Yes LAN/LXI Core Optional Yes Yes Yes	Capacitance	1.0 nF to 100.0 μF	1.0 nF to 100.0 µF	1.0 nF to 100.0 μF	1.0 nF to 100.0 μF
Statistical graphics Histogram, bar chart trend chart	Dual line display	Yes	Yes	Yes	Yes
Rear input terminals No Yes Yes Yes IO interface USB Yes Yes Yes LAN/LXI Core Optional Yes Yes Yes	Display	Color, graphical	Color, graphical	Color, graphical	Color, graphical
IO interface USB Yes Yes Yes Yes LAN/LXI Core Optional Yes Yes Yes	Statistical graphics	Histogram, bar chart			Histogram, bar chart, trend chart
USB Yes Yes Yes Yes LAN/LXI Core Optional Yes Yes Yes	Rear input terminals	No	Yes	Yes	Yes
LAN/LXI Core Optional Yes Yes Yes	IO interface				
	USB	Yes	Yes	Yes	Yes
GPIB Optional Optional Optional Optional	LAN/LXI Core	Optional	Yes	Yes	Yes
	GPIB	Optional	Optional	Optional	Optional

Option/upgrade description	Applicable models	Product option, factory installed	Product upgrade, user installed
Add GPIB interface	All	-GPB	3446GPBU
Enable NISPOM and	All	-SEC	3446SECU
file security			
Certificate of calibration:	All	-Z54	N/A
ANSI/ NCSL Z540.3-2006			
Enable LAN interface and	34460A	-LAN	3446LANU
external triggering			
Add accessory kit, includes	34460A	-ACC	3446ACCU
test leads, USB cable			
Enable 2 million readings	34465A/70A	-MEM	3446MEMU
memory			

Please consult with your distributor for final pricing.

Keysight also offers a number of accessories, economical handhelds, a high-performance 8½ digit 3458A DMM, and the L4411A 6½ digit DMM in a modular format.

www.keysight.com/find/alldmm

For more information on Keysight's Truevolt DMMs, please visit: www.keysight.com/find/truevolt

For more information on software to control, capture and view DMMs as well as other Keysight instruments with a single click, please visit: www.keysight.com/find/benchvue

Keysight Services

www.keysight.com/find/service

Keysight Services can help from acquisition to renewal across your instrument's lifecycle. Our comprehensive service offerings—one-stop calibration, repair, asset management, technology refresh, consulting, training and more—helps you improve product quality and lower costs.

Learn more at: www.keysight.com

