

R&S®UDS DIGITAL MULTIMETER SERIES

Built for accuracy, designed for ease



Target application

Engineering lab	General purpose
Production testing	Education

Your benefit	Features
See more at a glance	<ul style="list-style-type: none"> ▶ Simultaneous display of three measurements, e.g. DC + AC + statistics ▶ QVGA color display for excellent readability ▶ Limit testing directly on the display for easy minimum/maximum analysis
Versatile functions	<ul style="list-style-type: none"> ▶ Mathematic functions ▶ Built-in statistics ▶ Two- and four-wire measurements ▶ Limit testing
Remote controllability	<ul style="list-style-type: none"> ▶ Remote control via SCPI based commands ▶ Ethernet interface (LAN) with integrated web server ▶ Driver packages

Model options							
Model	Number of digits	Basic DC accuracy	Resolution	Max. Voltage	Max. Current	Interfaces	List Price
R&S®UDS500	5 ½	0.015 %	1 µV, 0.1 µA, 1 mΩ, 1 pF, 0.1 °C	1000 V DC, 750 V AC	10 A	USB, LAN	950 €
R&S®UDS500-G	5 ½	0.015 %	1 µV, 0.1 µA, 1 mΩ, 1 pF, 0.1 °C	1000 V DC, 750 V AC	10 A	USB, LAN, GPIB	1400 €
R&S®UDS600	6 ½	0.0075 %	0.1 µV, 0.01 µA, 0.1 mΩ, 0.1 pF, 0.1 °C	1000 V DC, 750 V AC	10 A	USB, LAN	1180 €
R&S®UDS600-G	6 ½	0.0075 %	0.1 µV, 0.01 µA, 0.1 mΩ, 0.1 pF, 0.1 °C	1000 V DC, 750 V AC	10 A	USB, LAN, GPIB	1630 €

Included accessories: 1-m silicon test leads with safety connector and test probe, set of power cables and quick start guide.

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Competitive analysis ¹⁾							
Specification	R&S®UDS500	R&S®UDS600	Keysight EDU34450A	Keysight 34460A	Keithley 2110 Series	Keithley 2100 Series	Why is this important
Number of digits	5 ½	6 ½	5 ½	6 ½	5 ½	6 ½	A higher number of digits indicates greater resolution.
Basic DC accuracy	0.015 %	0.0075 %	0.015 %	0.0075 %	0.012 %	0.0038 %	Minimizes errors in critical applications.
Maximum voltage	1000 V DC 750 V AC	1000 V DC 750 V AC	1000 V DC 750 V AC	1000 V DC 750 V AC	1000 V DC 750 V AC	1000 V DC 750 V AC	Expands the range of applications for the device
Maximum current	10 A	10 A	3 A	3 A	10 A	3 A	Allow for testing of devices that draw more power
Bandwidth	DC, 5 Hz - 100 kHz	DC, 5 Hz - 100 kHz	DC, 20 Hz to 300 kHz	DC, 3 Hz to 300 kHz	DC, 10 Hz to 300 kHz	DC, 3 Hz to 300 kHz	Accurately measuring signals that change rapidly
Simultaneous display of measurements	Yes, up to 3	Yes, up to 3	Yes, up to 2	Yes, up to 2	Yes, up to 2	Only 1	Enhances usability and efficiency
Remote control	USB, LAN, GPIB (-G models)	USB, LAN, GPIB (-G models)	USB, LAN	USB, LAN (optional), GPIB (optional)	USB	USB	Allow for automation and integration into larger testing setups

¹⁾Information based on market data as published by the manufacturer. Trade names are trademarks of the respective owners

Key features

► Simultaneous display of three measurements

- Depending on the selected measurement function, users can display multiple measured values.

► Data logging

- The data can be saved on an external USB flash drive or transferred to an external PC with a USB or LAN connection. The data rate of up to 10 sample/s means the measured values are available every 100 ms.

► Measurement versatility

- Up to 12 measurement functions: DCV, DCI, true RMS, ACV and ACI, frequency, two-wire and four-wire resistance, capacitance, continuity test, diode test, temperature, power. Mathematic functions: limit testing, min./max., average, offset, DC power, dB, dBm

► Limit testing

- The R&S®UDS digital multimeters have programmable test functions, including max./min. limits on/off. The display color changes to indicate limit violations: red for out-of-limit values and green for within-limit values. An error tone can be toggled on/off with the beeper soft menu key and sounds when limits are violated.

Accessories		
Cables	Item	List price
Silicon test lead, banana to banana, length: 1 m (set of 5, color: blue)	R&S®HZ10B	80 €
Silicon test lead, banana to banana, length: 1 m (set of 5, color: red)	R&S®HZ10R	80 €
Silicon test lead, banana to banana, length: 1 m (set of 5, color: black)	R&S®HZ10S	80 €
System components		
19" rack adapter, 2 HU, for R&S®NGE100B/NGC100/NPA/UDS and R&S®HMC series	R&S®HZC95	330 €

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