Product Fact Sheet

Keysight U1600 Series Handheld Oscilloscopes

Full-featured handheld scope gives you maximum versatility for troubleshooting in the factory or field.



Ordering Information

20 MHz Digital Handheld Oscilloscope	40 MHz Digital Handheld Oscilloscope
	
U1602B	U1604B

The U1602B/U1604B comes with:

Two sets of U1561A Scope Probe (10:1), U1571A Ni-MH Battery Pack 7.2 V 4500 mA, U1580A DMM Test Lead, Ground Alligator Clip, Medium Jaw Alligator Clip, Hook Clip, USB Cable, Power Cord and AC Adapter, Quick Start Guide, Certificate of Calibration.

Keysight Technologies, Inc. now offers its latest handheld scopes in all-new orange!

- Use this dual-channel scope with built-in DMM and data logger capability for high-performance trouble-shooting.
- View waveforms clearly and easily differentiate signals between two channels with large 4 ½ color LCD display.
- Uncover subtle details with up to 125,000 points of recording length and zoom function.
- Capture glitches easily with up to 200 MSa/s sampling rate and flexible triggering.
- Enhanced analysis with waveform math functions, and additional FFT capability on the U1604A/U1604B.
- Document results easily using the standard USB 2.0 interface.
- Built-in USB host option available for quick saving into USB memory device.

KEYSIGHT TECHNOLOGIES

Features	U1602B	U1604B
3-in-1 function: Scope, DMM, data-logger	Yes	Yes
Display	4.5” color display	4.5” color display
Oscilloscope channel count	2	2
Bandwidth	DC to 20 MHz	DC to 40 MHz
Maximum sampling rate	200 MSa/s, 100 MSa/s each channel	200 MSa/s, 100 MSa/s each channel
Maximum recording length	11,100 points for U1602A and 125,000 points for U1602B, viewable on screen with zoom function	11,100 points for U1604A and 125,000 points for U1604B, viewable on screen with zoom function
Cursor and zoom functions	Yes	Yes
Dual waveform math	CH1 + CH2, CH1 - CH2, CH2 - CH1	CH1 + CH2, CH1 - CH2, CH2 - CH1
FFT	No	Yes (Rectangular, Hamming, Hanning, Blackman-Harris)
Internal scope storage	Up to 10 setups and traces	Up to 10 setups and traces
Scope measurements	Up to 22 measurements	Up to 22 measurements
Coupling	AC, DC, GND	AC, DC, GND
Range	50 ns to 50 s/div	10 ns to 50 s/div
Rise time	< 17.5 ns	< 8.8 ns
Resolution	2 ns	400 ps
Input impedance	1 MΩ I I < 20 pF	1 MΩ I I < 20 pF
Triggering	Edge, Pattern, Pulse Width, Video	Edge, Pattern, Pulse Width, Video
Trigger modes	Auto, normal, single	Auto, normal, single
Standard scope probes	U1602A: 1.1 and 10:1 (standard); U1602B: 10:1 (standard), 2 units	U1604A: 1.1 and 10:1 (standard); U1604B: 10:1 (standard), 2 units
Digital multimeter full scale reading	6000 count	6000 count
DC voltage, True RMS AC voltage	Max 600 V	Max 600 V
Resistance	Max 60 MΩ	Max 60 MΩ
Capacitance	Max 300 µF	Max 300 µF
Source	Digital multimeter measurements	Digital multimeter measurements
Data logger automatic measurement	Selectable: Minimum, Maximum, Average	Selectable: Minimum, Maximum, Average
Record size	250 points	250 points
Time span	Auto range 150 s to 20 days	Auto range 150 s to 20 days
USB host capability for external memory	Optional	Optional
Connectivity	USB 2.0 full speed	USB 2.0 full speed
Battery	7.2 V Ni-MH rechargeable battery	7.2 V Ni-MH rechargeable battery
Safety compliance	CAT III 300 V, CSA, CE	CAT III 300 V, CSA, CE

Recommended optional accessories:



U1590A
Soft carrying case



U1561A
10:1 Scope probe



U1571A
Ni-MH battery pack



U1580A
DMM terminal test lead set

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Keysight Services helps you improve productivity and product quality with our comprehensive service offerings of one-stop calibration, repair, asset management, technology refresh, consulting, training, and more.

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