



## 6 in 1 Handheld Oscilloscope: Recorder, Arbitrary Waveform Generator, DMM, Spectrum Analyzer and Frequency Counter, Arbitrary Waveform Generator

### OHUI6000 Series

- High bandwidth 70, 100, 150, 200 MHz oscilloscope; 1GSa/s sampling rate; 2 M memory depth or 1 M memory depth with high refresh rate (2500 frames).
- 6000 count DMM, AC/DC voltage, AC/DC current, resistance, break, capacitance, and diode function.
- 25 MHz arbitrary waveform generator, 200 Mesa/s DDS, 12 bit vertical resolution, easy for simulating transducer.
- USB host / device; 2.0 full-speed interface; supports removable disk; WIFI / LAN option.
- IP-51 rated for dust, drip and shake proof to withstand harsh environments. Anti-theft lock hole, tripod fixed hole, hang rope, flashlight that can be used in the dark.

Model	OHUI6070		OHUI6100		OHUI6150		OHUI6200		
<b>Acquisition</b>	Sample Modes	Real-Time Sample							
<b>Acquisition Modes</b>	Normal	Normal data only							
	Peak Detect	High-frequency and random glitch capture							
	Average	Waveform Average, selectable 4, 8, 16, 32, 64, 128							
<b>Inputs</b>	Inputs Coupling	AC, DC, GND							
	Inputs Impedance	1 mΩ±2%, 20 pF±3 pF							
	Probe Attenuation	1X, 10X							
	Supported Probe Attenuation Factor	1X, 10X, 100X, 1000X							
	Maximum Input Voltage	CAT I and CAT II: 300 VRMS (10×), Installation Category; CAT III: 150 VRMS (1×)							
<b>Horizontal System</b>	Sample Rate Range	1 GS/s							
	Waveform Interpolation	(sin x)/x							
	Record Length	2 M							
	SEC/DIV Range	4 ns/div ~ 2000 s/div, in a 2, 4, 8 sequence				2 ns/div ~ 2000 s/div, in a 2, 4, 8 sequence			
	Sample Rate and Delay Time Accuracy	±50 ppm over any ≥1 ms time interval							
	Scanning Speed Range	4 ns/div to 8 ns/div; (-8div x s/div) to 40 ms;		2 ns/div to 10 ns/div; (-4divx s/div) to 20 ms;					
		20 ns/div to 80 μs/div; (-8divx s/div) to 40 ms							
200 μs/div to 40 s/div; (-8divx s/div) to 400 s									
Delta Time Measurement Accuracy (Full Bandwidth)	Single-shot, Normal mode: ± (1 sample interval + 100 ppm × reading + 0.6 ns); >16 averages: ± (1 sample interval + 100 ppm × reading + 0.4 ns); Sample interval = s/div ÷ 200								
<b>Vertical System</b>	Vertical Resolution	8-bit resolution, all channel sampled simultaneously							
	Volts Range	2 mV/div to 100 V/div at input BNC							
	Bandwidth	70 MHz	100 MHz	150 MHz	200 MHz				
	Rise Time at BNC (typical)	5 ns	3.5 ns	2.3 ns	1.8 ns				
	Analog Bandwidth in Normal and Average modes at BNC or with probe, DC Coupled	±400 V (100 V/div-20 V/div);							
		±50 V (10 V/div-5 V/div);							
±40 V (2 V/div-500 mV/div);									
	±2 V (200 mV/div-50 mV/div);								
	±400 mV (20 mV/div-2 mV/div);								
<b>Vertical System</b>	Math	+, -, *, /, FFT							
	FFT	Windows: Hanning, Flat top, Rectangular, Bartlett, Blackman; 1024 sample point							
	Bandwidth Limit	20 MHz							
	Low Frequency Response (-3db)	≤10 Hz at BNC							
	DC Gain Accuracy	±3% for Normal or Average acquisition mode, 100 V/div to 10 mV/div.							
		±4% for Normal or Average acquisition mode, 5 mV/div to 2 mV/div.							
	DC Measurement Accuracy, Average Acquisition Mode	Measurement Type: Average of ≥16 waveforms with vertical position at zero Accuracy: ± (3% × reading + 0.1div + 1 mV) when 10 mV/div or greater is selected							
		Measurement Type: Average of ≥16 waveforms with vertical position not at zero Accuracy: ± [3% × (reading + vertical position) + 1% of vertical position + 0.2div].							
Volts Measurement Repeatability, Average Acquisition Mode	Delta volts between any two averages of ≥16 waveforms acquired under same setup and ambient conditions								
<b>Trigger System</b>	Trigger Types	Edge, Video, Pulse, Slope, Over time, Alternative							
	Trigger Source	CH1, CH2, AC Line							
	Trigger Modes	Auto, Normal, Single							
	Coupling Type	DC, AC, HF Reject, LF Reject, Noise Reject							
	Trigger Sensitivity (Edge Trigger Type)	DC (CH1, CH2): 1div from DC to 10 MHz; 1.5div from 10 MHz to 100 MHz; 2div from 100 MHz to Full							
		AC: Attenuates signals below 10 Hz;							
		HF Reject: Attenuates signals above 80 kHz; LF Reject: Same as the DC-coupled limits for frequencies above 150 kHz; attenuates signals below 150 kHz							
	Trigger Level Range	CH1/CH2: ±8 divisions from center of screen;							
Trigger Level Accuracy	(typical)Accuracy is for signals having rise and fall times ≥20 ns CH1/CH2: 0.2div × volts/div within ±4 divisions from center of screen;								
Set Level to 50% (typical)	Operates with input signals ≥50 Hz								

<b>Video Trigger</b>	Video Trigger Type	CH1, CH2: Peak-to-peak amplitude of 2 divisions	
	Signal Formats and Field Rates	Supports NTSC, PAL and SECAM broadcast systems for any field or any line	
	Holdoff Range	100 ns ~ 10 s	
<b>Pulse Width Trigger</b>	Pulse Width Trigger Mode	Trigger when (<, >, =, or ≠); Positive pulse or Negative pulse	
	Pulse Width Trigger Point	<p>Equal: The oscilloscope triggers when the trailing edge of the pulse crosses the trigger level.</p> <p>Not Equal: If the pulse is narrower than the specified width, the trigger point is the trailing edge. Otherwise, the oscilloscope triggers when a pulse continues longer than the time specified as the Pulse Width.</p> <p>Less than: The trigger point is the trailing edge.</p> <p>Greater than (also called overtime trigger): The oscilloscope triggers when a pulse continues longer than the time specified as the Pulse Width</p>	
	Pulse Width Range	20 ns ~ 10 s	
<b>General Specifications</b>	Display Resolution	640 horizontal by 480 vertical pixels	
	Display Contrast	Adjustable (16 gears) with the progress bar	
<b>Probe Compensator Output</b>	Output Voltage (typical)	About 2 Vpp into ≥1 mΩ load	
	Output Voltage (typical)	1 kHz	
	Power Supply		
	Supply Voltage	AC Input: 100-240 VACRMS, 0.6 A MAX, 50 Hz ~ 60 Hz; DC Output: 9 V, 2 A	
<b>Environmental</b>	Power Consumption	<30 W	
	Temperature	Operating: 32 °F to 122 °F (0 °C to 50 °C); Nonoperating: -40 °F to 159.8 °F (-40 °C to +71 °C)	
	Cooling Method	Convection	
	Humidity	+104 °F or below (+40 °C or below): ≤90% relative humidity; 106 °F to 122 °F (+41 °C to 50 °C): ≤60% relative humidity	
<b>Mechanical</b>	Altitude	Operating: Below 3, 000 m (10, 000 feet); Nonoperating: <15,000 m (50,000 ft)	
	Size	260 mmmm; 220 mm; 75 mm	
<b>DMM Mode</b>	Weight	2.5 kg (without Packing)	
	Max. Resolution	6000 Counts	
	DMM Testing Modes	Voltage, current, resistance, capacitance, diode & continuity	
	Max. Input Voltage	AC: 600 V, DC: 800 V	
	Max. Input Current	AC: 10 A, DC: 10 A	
	Input Impedance	10 mΩ	
	DMM TrendPlot	1.2 M Point	
<b>Range</b>	<b>Resolution</b>	<b>Accuracy</b>	<b>Resolution</b>
<b>DC Voltage</b>	60.00 mV	±1%±3 digit	10 uV
	600.0 mV		100 uV
	6.000 V		1 mV
	60.00 V		10 mV
	600.0 V		100 mV
	800 V		1 V
<b>AC Voltage</b>	60.00 mV	±1%±3 digit	10 uV
	600.0 mV		100 uV
	6.000 V		1 mV
	60.00 V		10 mV
	600.0 V		100 mV
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	Max. Input Current	AC: 10 A, DC: 10 A		
	Input Impedance	10 mΩ		
	DMM TrendPlot	1.2 M Point		
Range	Resolution	Accuracy	Resolution	
<b>DC Voltage</b>	60.00 mV	±1%±3 digit	10 μV	
	600.0 mV		100 μV	
	6.000 V		1 mV	
	60.00 V		10 mV	
	600.0 V		100 mV	
	800 V		1 V	
	<b>AC Voltage</b>		60.00 mV	±1%±3 digit
600.0 mV		100 μV		
6.000 V		1 mV		
60.00 V		10 mV		
600.0 V		100 mV		
800 V		1 V		
<b>DC Current</b>	60.00 mA	±1%±5 digit	10 μA	
	600.0 mA	±1.5%±5 digit	100 μA	
	6.000 A		1 mA	
	10.00 A		10 mA	
<b>AC Current</b>	60.00 mA	±1%±5 digit	10 μA	
	600.0 mA	±1.5%±5 digit	100 μA	
	6.000 A		1 mA	
	10.00 A		10 mA	
<b>Resistance</b>	600 Ω	±1%±3 digit	0.1 Ω	
	6.000 KΩ		1 Ω	
	60.00 KΩ		10 Ω	
	600.0 KΩ		1 KΩ	
	6.000 mΩ		10 KΩ	
	60.00 mΩ		±1%±5 digit	100 KΩ
	600.0 mΩ		±2%±5 digit	10 pF
40.00 nF	100 pF			
400.0 nF	1 nF			
4.000 μF	10 nF			
40.00 μF	100 nF			
400.0 μF	1000 nF			
Attention: the smallest capacitance value that can be measured is 5 nF.				
<b>Diode</b>	0 V ~ 2.0 V			
<b>On-Off Test</b>	<10 Ω			

**Accessories:**

<b>OHUI6000-A1</b>	Adapter
<b>OHUI6000-A2</b>	Oscilloscope Probes (x2) and Test Leads (x2)
<b>OHUI6000-A3</b>	Software CD
<b>OHUI6000-A4</b>	Portable Bag
<b>OHUI6000-A5</b>	Velcro Hanger
<b>OHUI6000-A6</b>	A BNC to BNC Cable and a Replaceable BNC Head
<b>OHUI6000-A7</b>	Car Power Adapter
<b>OHUI6000-A8</b>	Aluminum Alloy Cabinet

**Options:**

<b>OHUI6000-A9</b>	LAN Interface
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