

HDS-N Series Handheld Digital Storage Oscilloscope



- + 2 in 1 (DSO + Multimeter)
- + Auto-scale function
- + FFT function
- + 20 group automatic measurement options
- + Bandwidth : 20MHz - 100MHz
- + USB data transmission supported
- + Rechargeable Li-ion battery (6 hours' backup)
- + Waveform record and replay (excluding HDS1022M-N)
- + Multimeter newly supported SCPI

+ Performance Specifications

Model	HDS1022M-N	HDS2062M-N	HDS3102M-N	HDS4202M-N
Bandwidth	20MHz	60MHz	100MHz	200MHz
Sample Rate (real time)	100MS/s	500MS/s	1GS/s	
Horizontal Scale (s/div)	5ns/div - 100s/div, step by 1 - 2.5 - 5	5ns/div - 100s/div, step by 1 - 2 - 5		2ns/div - 100s/div, step by 1 - 2 - 5
Rise Time (at input, typical)	≤ 17.5ns	≤ 5.8ns	≤ 3.5ns	≤ 1.7ns
Display	3.7" inch color LCD, TFT display, 640 x 480 pixels, 65535 colors			
Channel	dual			
Input Impedance	1MΩ ± 2%, in parallel with 20pF ± 5pF	1MΩ ± 2%, in parallel with 15pF ± 5pF		
Record Length	max 6K points on each channel			
Interpolation	sin(x)/x			
Probe Attenuation Factor	1X , 10X , 100X , 1000X			
Input Coupling	DC, AC, and GND			
DC Accuracy (average)	average > 16 : ±(5% reading + 0.05 div) for ΔV			
Vertical Sensitivity	5mV/div - 5V/div (at input)			
Vertical Resolution (A/D)	8 bits (2 channels simultaneously)			
Max Input Voltage	400V (PK - PK) (DC + AC, PK - PK, 1MΩ input impedance, probe attenuation 10 : 1), CAT II			
Trigger Type	Edge, Video, Alternate			
Trigger Mode	Auto, Normal, Single			
Trigger Level	±6 divisions from screen center			
Acquisition Mode	Sample, Peak Detect, and Average			
DC Gain Accuracy	±3%			
Automatic Measurement	Vpp, Vavg, Vrms, Freq, Period, Vmax, Vmin, Vtop, Vbase,Vamp, Overshoot, Preshoot, Rise Time, Fall Time, Delay A→B, Delay A→B, +Width, -Width, +Duty, -Duty			

Model		HDS1022M-N	HDS2062M-N	HDS3102M-N	HDS4202M-N
Waveform Math		+, -, ×, ÷, invert, FFT			
Waveform Storage		4 waveforms			
Lissajous Figure	Bandwidth	full bandwidth			
	Phase Difference	±3 degrees			
Communication Interface		USB			
Power Supply		100V-240V AC, 50/60Hz			
Li-ion Battery		7.4V, 6 hours' operation			
Dimensions (W × H × D)		115 × 180 × 40 (mm)			
Weight (without package)		645 g			

+ Multimeter Specifications

Full Scale Reading	3 ³ / ₄ digits (max 4000 count)	Diode	0V - 1.5V
Input Impedance	10 MΩ	On / Off Test	<50 (± 30) beeping
Voltage	VDC : 400mV, 4V, 40V, 400V, 1000V : ±(1% ± 1 digit); max input : DC 1000V VAC : 4V, 40V, 400V : ±(1% ± 3 digits), 750V : ±(2% ± 3 digits); Frequency : 40Hz - 400Hz; max input : AC 400V (virtual value)		
Current	DC : 40mA, 400mA : ±(1.5% ± 1 digit), 10A : ±(3% ± 3 digits) AC : 40mA : ±(1.5% ± 3 digits), 400mA : ±(2% ± 1 digit), 20A : ±(5% ± 3 digits)		
Impedance	400Ω : ±(1% ± 3 digits), 40KΩ - 4MΩ : ±(1% ± 1 digit), 40MΩ : ±(1.5% ± 3 digits)		
Capacitance	51.2nF - 100uF : ±(3% ± 3 digits)		

Specifications subject to change without prior notice.

+ Application

electronic circuit debugging
education and training

circuit testing
automobile maintenance and testing

design and manufacture

+ Accessories

The accessories subject to final delivery.



Power Cord



CD Rom



Manual



USB Cable



Probe



Probe Adjust



Multimeter Lead



Adapter



5V, 1KHz Output



Capacitance Ext Module



Soft Bag (optional)



Metal Case