

## HDS-N Series

### Handheld Digital Storage Oscilloscope

- + 2 in 1 (DSO + Multimeter)
- + Auto-scale function
- + FFT function
- + 20 group automatic measurement options
- + Bandwidth : 20MHz - 200MHz
- + USB data transmission supported
- + Rechargeable Li-ion battery (6 hours' backup)
- + Waveform record and replay
- + 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	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" color TFT display (640 × 480 pixels)			
Channel	dual			
Input Impedance	1MΩ ± 2%, in parallel with 20pF ± 5pF	1MΩ ± 2%, in parallel with 15pF ± 5pF		
Record Length	6K points			
Interpolation	sin (x) / x			
Probe Attenuation Factor	1X , 10X , 100X , 1000X			
Input Coupling	DC, AC, and GND			
DC Accuracy (average)	average >16 : ±(5% reading + 0.05div) for ΔV			
Vertical Sensitivity	5mV/div ~ 5V/div (at input)			
Vertical Resolution (A/D)	8 bits			
Max Input Voltage	400V (PK - PK) (DC + AC, PK - PK, 1MΩ input impedance, probe attenuation 10 : 1), CAT II			
Trigger Type	Edge, Video, and Alternate			
Trigger Mode	Auto, Normal, and 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, +Width, -Width, +Duty, -Duty, Delay A→B, Delay A→B			
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)		645.00 g

## + Multimeter Specifications

Full Scale Reading	3 $\frac{3}{4}$ digit (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 750V (virtual value)		
Current	DC : 40mA, 400mA : ±(1.5% ± 1 digit), 10A : ±(3% ± 3 digits) AC : 40mA : ±(1.5% ± 3 digits), 400mA : ±(2% ± 1 digit), 10A : ±(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

design and manufacture  
automobile maintenance and testing

## + Accessories

The accessories subject to final delivery.



Power Cord



CD Rom



USB Cable



Probe



Probe Adjust



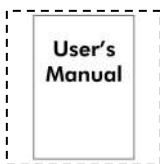
Multimeter Lead



Adapter



5V, 1KHz Output



Manual



Capacitance Ext  
Module



Soft Bag  
(optional)



Metal Case