



HDS-N Series

Handheld Digital Storage Oscilloscope

- + 2 in 1 (DSO + Multimeter)
- + Auto-scale function
- + FFT function
- + 20 group automatic measurement options
- + Bandwidth : 200MHz
- + USB data transmission supported
- + Rechargeable Li-ion battery (6 hours' backup)
- + Waveform record and replay
- + Multimeter newly supported SCPI

+ Performance Specifications

Model	HDS4202M-N	
Bandwidth	200MHz	
Sample Rate (real time)	1GS/s	
Horizontal Scale (s/div)	2ns/div ~ 100s/div, step by 1 ~ 2 ~ 5	
Rise Time (at input, typical)	≤ 1.7ns	
Display	3.7 inch color display with TFT panel (640 × 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 + 0.05div) 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, Pre-shoot, Rise Time, Fall Time, +Width, -Width, +Duty, -Duty, Delay A→B, Delay A→B	

Waveform Math	+, -, ×, ÷, invert, FFT	
Waveform Storage	4 waveforms	
Lissajous	Bandwidth	full bandwidth
Figure	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)	180 × 115 × 40 (mm)	
Weight (without package)	645 g	

+ Multimeter Specifications

Full Scale Reading	3 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 400V (virtual value)		
Current	DC : 40mA, 400mA : ±(1.5% ± 1 digit), 20A : ±(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



USB



Probe



Probe Adjust



Multimeter Lead



Adapter



5V, 1KHz Output



Manual



Capacitance Ext
Module



Soft Bag (optional)



Metal Case