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Hantek

PRODUCT CATALOG

Qingdao Hantek Electronic Co.，Ltd

Your testing solution provider

About Us

Qingdao Hantek Electronic Co., Ltd. is a professional manufacturer of testing and measuring instruments that integrates research and development, production, sales, and service.

Since its establishment for more than 20 years, the company has always adhered to the principle of "technological innovation", providing users with "leading testing and measurement solutions" and "top-notch testing and measurement instruments and equipment", making first-class products and creating first-class brands!

With many years of technical advantages and development experience, Qingdao Hantek Electronic Co., Ltd. has successively developed and produced dozens of new products, including Spectrum Analyzer, Handheld Oscilloscope, Digital Storage Oscilloscope, Arb. Waveform Generator, Logic Analyzer, PC USB Oscilloscope, DC Power Supply, etc.

Qingdao Hantek Electronic Co., Ltd. is a national high-tech enterprise that has passed ISO9000 quality management system certification and ISO14000 environmental management system certification. We have undertaken multiple national torch program projects and Qingdao science and technology research projects, and are supported by the National Innovation Fund.

Along the way, Qingdao Hantek Electronic Co., Ltd. will provide customers with continuous and effective professional services with strict quality, reliable reputation, and perfect service, establish a win-win cooperation relationship, and work together to create a better tomorrow!

CONTENT

Contents

Spectrum Analyzer

HSA2000 Series

9K~3.2GHz, 3.2GHz Tracking Generator

Spectrum Analyzer

Product Features

- IP-51 high protection portable design, sturdy and durable, suitable for the field;
- 5.6 inch 64M color LCD display, 640 × 480 resolution;
- 7.4V/7,800mAh large capacity lithium battery pack lasts up to 4 hours;
- USB 2.0 and LAN for quick and easy connectioty to a PC;
- Low display average noise level (DANL);
- Optimal sensitivity: -161dBm, standard preamplifier, 3.2G or 1.6G tracking generator.

Specification

Model			HSA2030A	HSA2030B	HSA2016A	HSA2016B
Frequency	Frequency Range		9KHz - 3.2GHz AC Coupled		9KHz - 1.6GHz AC Coupled	
	Frequency Resolution		1Hz			
Tracking Generator (TG)	Range		N/A	5MHz - 3.2GHz	N/A	5MHz - 1.6GHz
Frequency Reference	Nominal Frequency		10MHz			
	Aging Rate		±1ppm/year (0°C~50°C, reference is 25°C)			
	Temperature Stability		±1ppm/year			
Redout Accuracy	Marker Resolution		(Frequency span)/(number of sweep point - 1)			
	Uncertainty		± (frequency indication x frequency reference uncertainty +1% x span + 20%RBW + marker resolution+1Hz)			
Frequency Counter	Counter Resolution		1Hz			
	Accuracy		± (marker frequency × frequency reference uncertainty + counter resolution)			
Frequency Span	Range		0Hz (zero span), 100Hz to 3.2GHz			
	Resolution		0Hz			
	Accuracy		± Span/(Sweep point-1)			
SSB Phase Noise	Carrier Offset (20°C ~ 30°C, 500MHz Center Frequency)	10 KHz	< -92 dBc/Hz, -95 dBc/Hz typical			
		30 KHz	< -93 dBc/Hz, -96 dBc/Hz typical			
		100 KHz	< -95 dBc/Hz, -97 dBc/Hz typical			
		1 MHz	< -117 dBc/Hz, -119 dBc/Hz typical			
Resolution Bandwidth (RBW)	Range (-3dB Bandwidth)		1Hz to 1MHz in 1-3-10 sequence			
	Accuracy		± 5% RBW = 10Hz~1MHz nominal			
	Resolution Filter Shape Factor		< 5 : 1 nominal			
Video Bandwidth (VBW)	Range (-3dB Bandwidth)		1Hz to 1MHz in 1-3-10 sequence			
	Accuracy		± 10% VBW = 1Hz~1MHz nominal			
Measurement Range	100KHz~2MHz	PreampOff	Display average noise level (DANL) to + 10dB			
	2MHz~3.2GHz	PreampOff	Display average noise level (DANL) to + 20dB			
	Input Attenuator Range		0 to 51dB, 1dB steps			
Maximum Damage	Average Continuous Power		+33dBm, maximum 3-minute, input attenuatior setting ≥ 20dB, 2MHz~3GHz			
	DC Voltage		50 VDC maximum			
Displayed Average Noise Level (Normalized to 1Hz)	9KHz~1MHz	PreampOff	-108dBm, -127dBm typical			
	1MHz~10MHz	PreampOff	-128dBm, -146dBm typical			
	10MHz~500MHz	PreampOff	-142dBm, -146dBm typical			
	500MHz~2.5GHz	PreampOff	-141dBm, -145dBm typical			
	2.5GHz~3.2GHz	PreampOff	-140dBm, -144dBm typical		N/A	
	9KHz~1MHz	PreampOn	-131dBm, -150dBm typical			
	1MHz~10MHz	PreampOn	-148dBm, -163dBm typical			
	10MHz~500MHz	PreampOn	-161dBm, -164dBm typical			
	500MHz~2.5GHz	PreampOn	-159dBm, -162dBm typical			
	2.5GHz~3.2GHz	PreampOn	-158dBm, -161dBm typical		N/A	
Level Display Range	Resolution (Linear Scale)		0 to 100%, 10 divisions displayed			
	Scale Units		dBm, dBmV, dBμV, Watts, Volts			
	Sweep (Trace) Points		461			
	Number of Markers		4			
	Detectors		Normal, positive-peak, sample, negative-peak, RMS (average)			
	Number of Traces		4			
	Trace Function		Clear/write, maximum hold, minimum hold, average, check, close			
	Level Measurement Error		±1.5dB (excluding input VSWR mismatch) 20~30°C, peak detector, preamplifier off, input signal -50dBm to 0dBm			
Reference Level	Setting Range		-100dBm to + 30dBm, steps of 1dB			
	Setting Resolution	Log Scale	0.01dB			
		Linear Scale	Almost log(2.236μV to 7.07V)			
Sweep Time	Range	Span > 100Hz	2ms to 1,000s			
		Span = 0Hz	600ns to 200s			
	Mode		Continuous, single			
	Trigger		Free run, video, external			
	Trigger Slope		Selectable positive or negative edge			
	Trigger Delay	Span = 0Hz	±12ms to ± 12s nominal			
RF Input	Connector and Impedance		N-type female; 50Ω			
EXT Reference Input	Frequency		10MHz			
	Input Amplitude		0~10dBm			
External Trigger Input	Connector and Impedance		N-type female; 50Ω			
General	Power Adapter		Input: 100 to 240VAC, 50 to 60Hz, 1.5A max.; Output: 12 to 17VDC, 2.8A max.			
	Display		5.6 inch, 600 x 480 resolution, 64M color LCD			
	Dimensions		260 mm x 220mm x 75mm; 2.9kg (including battery); 2.6kg (excluding battery)			

Digital Oscilloscope DPO8000 Series

1GHz, 8GSa/s, 2Gpts Memory Depth

Digital Oscilloscope

Product Features

- 7-in-1 instrument integration: oscilloscope, 16-channel logic analyzer, spectrum analyzer, frequency counter, DVM, arbitrary waveform generator, protocol analyzer;
- Up to 8GSa/s real-time sampling rate, 2G memory depth, hardware real-time waveform recording and playback up to 2 million frames;
- Rich serial protocol triggering and decoding;
- Up to 500,000 wfms/s waveform capture rate;
- Up to 41 automated measurements;
- Multiple data gathering and analysis: search, navigate and lister, histogram, bode plotter, power analyzer, counter.

Specification

Model		DPO8104E	DPO8084E	DPO8054E	DPO8034E
Analog Channels		4			
Bandwidth		1GHz	800MHz	500MHz	300MHz
Sampling Rate		8GSa/s single channel, 8GSa/s half channels, 4GSa/s all channels			
Memory Depth		2Gpts (single channel), 1Gpts (dual channels), 500Mpts (three or four channels)			
Waveform Capture Rate		500,000 wfms/s [for 25ns, dots display, single channel, auto memory depth]			
Vertical Resolution		8 bit			
Input Sensitvity		1 MΩ: 500μV/div ~ 10 V/div			
		50 Ω: 500μV/div ~ 1 V/div			
Timebase Range		200ps/div~1 ks/div	500ps/div~1 ks/div	500ps/div~1 ks/div	1ns/div~1 ks/div
Timebase Accuracy		±1 ppm ± 1 ppm/year aging			
Bandwidth Limit		20 MHz, 100MHz, 200MHz, 350MHz, 650MHz, 750MHz (Independent option for each channel)			
Trigger Type		Edge, Pulse, Video, Slope, Overtime, Window, Runt, Superamp, Pattern, Delay, Setup/Hold, RS232, LIN, CAN, SPI, I²C			
Serial Bus Decode		RS232, I²C, SPI, LIN, CAN			
Arithmetic		Add, Subtract, Multiply, Divide, FFT, A&&B, A||B, A^B, !A, Intg, Diff, Sqrt, Lg, Ln, Exp, Abs, AX+B, Low Pass, High Pass, Band Pass, Band Stop			
Automatic Measurements		41 measurements, measurements update continously with statistics			
Analyze		Counter, DVM, Power anlyzer, Histogram, Search, Navigate, Bode plotter			
Recorder		≥ 2 million frames (single channel)			
Input Coupling		DC, AC or GND			
Input Impedance		1 MΩ ± 1%, 50 Ω ± 1% ; 21 pF ± 3 pF			
Waveform Generator	Sampling Rate	200 MSa/s			
	Amplitude Resolution	12 bit			
	Max. Frequency	25 μHz			
	Waveform	Sine, Square, Pulse, Ramp, Noise, DC, Sinc, EXP, Rise, Fall, Lorentz, Gauss, ECG, Haver Sine, Arb.			
Digital Channels	Input Channels	16			
	Sampling Rate	1GSa/s			
Connectivity		USB host, USB device, LAN, Optional ports: HDMI, RS232			
Display		10.1 inch capactitive multi-touch, 256 intensity levels, color graded persistence			

Model

Model	Analog Channels	Bandwidth	Max. Real-time Sampling Rate	Max. Memory Depth	Max. Waveform Capture Rate	Digital Channels	Waveform Generator
DPO8104E	4	1GHz	8GSa/s	2Gpts	500,000 wfms/s	16	200MHz, 2 Output
DPO8084E	4	800MHz	8GSa/s	2Gpts	500,000 wfms/s	16	200MHz, 2 Output
DPO8054E	4	500MHz	8GSa/s	2Gpts	500,000 wfms/s	16	200MHz, 2 Output
DPO8034E	4	350MHz	8GSa/s	2Gpts	500,000 wfms/s	16	200MHz, 2 Output
DPO8104C	4	1GHz	8GSa/s	2Gpts	500,000 wfms/s	--	--
DPO8084C	4	800MHz	8GSa/s	2Gpts	500,000 wfms/s	--	--
DPO8054C	4	500MHz	8GSa/s	2Gpts	500,000 wfms/s	--	--
DPO8034C	4	350MHz	8GSa/s	2Gpts	500,000 wfms/s	--	--

Digital Oscilloscope DPO7000 Series

500MHz, 2GSa/s, 2Gpts Memory Depth

Digital Oscilloscope

Product Features

- 7-in-1 instrument integration: oscilloscope, 16-channel logic analyzer, spectrum analyzer, frequency counter, DVM, arbitrary waveform generator, protocol analyzer;
- Up to 2GSa/s real-time sampling rate, 2G memory depth, hardware real-time waveform recording and playback up to 2 million frames;
- Rich serial protocol triggering and decoding;
- Up to 500,000 wfms/s waveform capture rate;
- Up to 41 waveform automated measurements;
- Multiple data gathering and analysis: search, navigate and lister, histogram, bode plotter, power analyzer, counter.

Specification

Model		DPO7504E	DPO7354E	DPO7204E	DPO7104E
Analog Channels		4			
Bandwidth		500MHz	350MHz	200MHz	100MHz
Sampling Rate		2GSa/s single channel, 2GSa/s half channels, 1GSa/s all channels			
Memory Depth		2Gpts (single channel), 1Gpts (dual channels), 500Mpts (three or four channels)			
Waveform Capture Rate		500,000 wfms/s [for 25ns, dots display, single channel, auto memory depth]			
Vertical Resolution		8 bit			
Input Sensitvity		1 MΩ: 500μV/div ~ 10 V/div			
		50 Ω: 500μV/div ~ 1 V/div			
Timebase Range		500ps/div~1 ks/div	1ns/div~1 ks/div	2ns/div~1 ks/div	5ns/div~1 ks/div
Timebase Accuracy		±1 ppm ± 1 ppm/year aging			
Bandwidth Limit		20 MHz, 100MHz, 200MHz, 350MHz, 650MHz, 750MHz (Independent option for each channel)			
Trigger Type		Edge, Pulse, Video, Slope, Overtime, Window, Runt, Superamp, Pattern, Delay, Setup/Hold, RS232, LIN, CAN, SPI, I²C			
Serial Bus Decode		RS232, I²C, SPI, LIN, CAN			
Arithmetic		Add, Subtract, Multiply, Divide, FFT, A&&B, AllB, A^B, !A, Intg, Diff, Sqrt, Lg, Ln, Exp, Abs, AX+B, Low Pass, High Pass, Band Pass, Band Stop			
Automatic Measurements		41 measurements, measurements update continously with statistics			
Analyze		Counter, DVM, Power anlyzer, Histogram, Search, Navigate, Bode plotter			
Recorder		≥ 2 million frames (single channel)			
Input Coupling		DC, AC or GND			
Input Impedance		1 MΩ ± 1%, 50 Ω ± 1% ; 21 pF ± 3 pF			
Waveform Generator	Sampling Rate	200 MSa/s			
	Amplitude Resolution	12 bit			
	Max. Frequency	25 μHz			
	Waveform	Sine, Square, Pulse, Ramp, Noise, DC, Sinc, EXP, Rise, Fall, Lorentz, Gauss, ECG, Haver Sine, Arb.			
Digital Channels	Input Channels	16			
	Sampling Rate	1GSa/s			
Connectivity		USB host, USB device, LAN, Optional ports: HDMI, RS232			
Display		10.1 inch capactitive multi-touch, 256 intensity levels, color graded persistence			

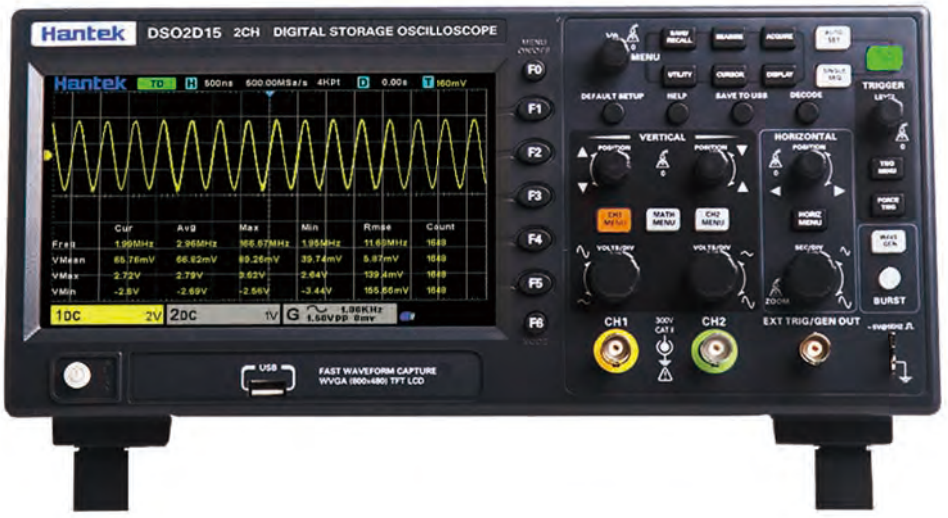
Model

Model	Analog Channels	Bandwidth	Max. Real-time Sampling Rate	Max. Memory Depth	Max. Waveform Capture Rate	Digital Channels	Waveform Generator
DPO7102C	2	100MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7202C	2	200MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7352C	2	350MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7502C	2	500MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7104C	4	100MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7204C	4	200MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7354C	4	350MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7504C	4	500MHz	2GSa/s	2Gpts	500,000 wfms/s	--	--
DPO7102E	2	100MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7202E	2	200MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7352E	2	350MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7502E	2	500MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7104E	4	100MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7204E	4	200MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7354E	4	350MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output
DPO7504E	4	500MHz	2GSa/s	2Gpts	500,000 wfms/s	16	25MHz, 1 Output

Digital Oscilloscope DSO2000 Series

150MHz, 1GSa/s, 8M Memory Depth

Digital Oscilloscope



Product Features

- 2 channels, 100MHz and 150MHz bandwidth;
- Sampling rate up to 1 GSa/s;
- 8M memory depth;
- Vertical range from 2mV/div to 10V/div;
- With digital voltage meter and frequency counter;
- Vertical resolution: 8 bits;
- Trigger mode: Edge, Pulse, Video, Slope, Overtime, Window, Pattern, Interval, Under Amp;
- Serial decode/trigger options for: UART, I2C, SPI, CAN, LIN;
- Can save multiple data formats, such as settings, waveforms, reference waveforms, CSV, pictures;
- 32 built-in measurement and a measurement statistics dispiay;
- Bulit-in 1 output 25MHz waveform generator (in DSO2D10, DSO2D15 models).

Specification

Model	DSO2D15	DSO2D10
Analog Channels	2	
Bandwidth	150MHz	100MHz
Sample Rate	1GSa/s (single channel), 500MSa/s (all channels)	
Memory Depth	8Mpts (single channel), 4Mpts (all channels)	
Rising Time	≤2.4ns	≤3.5ns
Vertical Resolutior	8 bit	
Vertical Sensitivity	1 MΩ: 500μV/div ~ 10 V/div	
Time Base Range	2ns/div~1 ks/div	
Bandwidth Limit	20MHz (selectable)	
Trigger Type	Edge, Pulse, Video, Slope, Timeout, Window, Pattern, Interval, Under Amp	
Bus and Decoding	UART, LIN, CAN, SPI, IIC	
Arithmetic	Add, subtract, multiply, divide, FFT	
Measurements	32 automated measurements, with statistics	
Analysis Function	Frequency counter, DVM	
Acquistion Mode	Normal, Average, Peak Detect, HR (High Resolution)	
Input Coupling	DC, AC or GND	
Input Impedance	1 MΩ ± 1%	
Waveform Generator	Sampling rate: 200 MSa/s Vertical resolution:12 bits Maximum output frequency: 25 MHz Waveforms: Sine, Square, Ramp, Exp, Noise, DC, Arbitrary	
Connectivity	USB host, USB device, External trigger input	
Display	7-inch 64K TFT LCD	

Model

Model	Channels	Bandwidth	Sampling Rate	Memory Depth	Digital Voltmeter	Input Sensitivity	Waveform Generator
DSO2D15	2	150MHz	1GSa/s	8Mpts	2 source, 3 digits	2mV/div ~ 10 V/div	25MHz, 1 Output
DSO2D10	2	100MHz	1GSa/s	8Mpts	2 source, 3 digits	2mV/div ~ 10 V/div	25MHz, 1 Output
DSO2C15	2	150MHz	1GSa/s	8Mpts	2 source, 3 digits	2mV/div ~ 10 V/div	--
DSO2C10	2	100MHz	1GSa/s	8Mpts	2 source, 3 digits	2mV/div ~ 10 V/div	--

Waveform Generator | HDG3000B

2 Channels, 100MHz Bandwidth, 16 Bits Vertical Resolution, 80MHz Frequency Counter

Product Features

- Frequency range: 1μHz ~ 100MHz/80MHz/60MHz/40MHz/25MHz/15MHz;
- Up to 300MSa/s sampling rate;
- Arbitrary waveform generator with 16 bits resolution, 2M waveform length;
- Two channels with the same performance;
- More than 160 arbitrary waveforms, including exponential rise, exponential fall, ECG, Gauss, Lorentz,haversine, dual-tone, DC etc;
- 4.3-inch color TFT LCD display;
- Support AM, DSB - AM, FM, PM, ASK, FSK PSK, BPSK, QPSK, 3 FSK, 4 FSK, OSK and PWM modulations;
- 1 μHz frequency resolution and 1mVpp to 10Vpp output amplitude;
- Built in 80MHz, 7-digit frequency counter;
- Frequency sweep and burst capability;
- Built-in high-order harmonic generator (at most 16-order harmonic).

Specification

Model		HDG3102B	HDG3082B	HDG3062B	HDG3042B	HDG3022B	HDG3012B
Channels		2					
Waveform Length		2M points					
Max. Frequency		100MHz	80MHz	60MHz	40MHz	25MHz	15MHz
Sampling Rate		300MSa/s					
Vertical Resolution		16 bits					
Standard Waveforms		Sine, Square, Triangle, Pulse, Noise, Harmonic					
Arbitrary Waveforms		160 arbitrary waveforms, including Exponential rise, Exponential fall, ECG, Gauss, Haversin, Lorentz, Double-tone, DC, etc.					
Frequency Range	Sine	1μHz~100MHz	1μHz~80MHz	1μHz~60MHz	1μHz~40MHz	1μHz~25MHz	1μHz~15MHz
	Square	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz
	Pulse	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz
	Triangle	1μHz~2MHz	1μHz~2MHz	1μHz~2MHz	1μHz~2MHz	1μHz~2MHz	1μHz~2MHz
	Harmonic	1μHz~50MHz	1μHz~40MHz	1μHz~30MHz	1μHz~20MHz	1μHz~10MHz	1μHz~5MHz
	Noise Bandwidth (-3dB)	100MHz					
	Arbitrary	1μHz~20MHz	1μHz~20MHz	1μHz~20MHz	1μHz~15MHz	1μHz~15MHz	1μHz~15MHz
Frequency Resolution		1μHz					
Internal Frequency Reference Accuracy		±1ppm, 18~28℃					
Amplitude Range in 50Ω		≤10MHz: 1mVpp ~ 10Vpp					
		≤55MHz: 1mVpp ~ 5.5Vpp					
		≤80MHz: 1mVpp ~ 3.5Vpp					
		≤100MHz: 1mVpp ~ 2Vpp					
Amplitude Accuracy		Typical (1kHz Sine, 0V offset, > 10mVPP)					
		± 1% of setting ± 5mVpp					
Amplitude Flatness (relative to 1kHz Sine, 1Vpp, 50Ω)		≤5MHz: ±0.1dB					
		≤15MHz: ±0.2dB					
		≤25MHz: ±0.3dB					
		≤40MHz: ±0.5dB					
		40MHz: ±1.0dB					
Amplitude Units		Vpp, mVpp, Vrms, dBm in 50Ω					
Amplitude Resolution		1mVpp					
External Reference Input Frequency Range		10MHz ± 50Hz					
Internal Referance Output	Level	3.3Vpp					
	Output Impedance	50Ω, DC coupling					
Frequency Counter	Measurement Function	Frequency, Period, Positive/Negative Pulse Width, Duty Cycle					
	Frequency Resolution	7 digits					
	Frequency Range	1μHz~80MHz					
	Gate Time	10ms~16s					
	Input Signal Range	0~3.3V					
	Connectors	USB Host, USB Device					
Display		4.3-inch color TFT LCD					
Power Voltage		100-120VAC$_{RMS}$(±10%),45Hz to 440Hz, CATII					
		120-240VAC$_{RMS}$(±10%),45Hz to 66Hz, CATII					
Power Consumption		<30W					
Fuse		T, 0.25A, 250V, 5x20mm					
Temperature		Operating: 10℃ ~ 40℃					
		Storage: -20℃ ~ 60℃					
Cooling Method		Fan cooling					
Operating Humidity		≤+104°F(≤+40°C): Relative humidity ≤90%					
		106°F~122°F (+41°C ~50°C): Relative humidity ≤60%					
Altitude		Operating: below 3,000 meters					
		Non-operating: below 15,000 meters					
Dimensions		318mm x 110mm x 150mm (W x H x D)					
Weight		2.5kg					

Waveform Generator | HDG6000B Series

2-Channels, 200MHz Output, 16-Bit, 1.25GSa/s, 64M Memory Depth

Product Features

- Output frequency range: 1μHz ~ 200MHz / 160MHz / 110MHz / 80MHz;
- Up to 1.25GSa/s sampling rate, 16bits vertical resolution;
- Built-in 16-order harmonic generator;
- 16 channels digital output together with the analog channels can rebuild the more mixed signals;
- Up to 64M memory depth, ensuring better waveform detail creation;
- 7-inch color TFT LCD display;
- Continuous, sweeping, burst and modulation modes (AM, FM, PM, 2ASK, 2FSK, 2PSK, PWM), covers most test requirements;
- Built in 200MHz counter with 7-digit resolution;
- More than 150 arbitrary waveforms built-in generate all kinds of waveforms needed in a laboratory.

Specification

Model		HDG6202B	HDG6112B	HDG6202C	HDG6112C
Channels		2			
Waveform Length		64M			
Max. Frequency		200MHz	110MHz	200MHz	110MHz
Sampling Rate		1.25GSa/s			
Voltage Resolutio		16bits			
Standard waveforms		sine, square, triangle, pulse, noise, harmonic			
Arb. Waveforms		> 150			
Frequency Range	Sine	1μHz~200MHz	1μHz~110MHz	1μHz~200MHz	1μHz~110MHz
	Square	1μHz~60MHz	1μHz~50MHz	1μHz~60MHz	1μHz~50MHz
	Pulse	1μHz~50MHz	1μHz~40MHz	1μHz~50MHz	1μHz~40MHz
	Triangle	1μHz~5MHz	1μHz~4MHz	1μHz~5MHz	1μHz~4MHz
	Harmonic	1μHz~50MHz	1μHz~50MHz	1μHz~50MHz	1μHz~50MHz
	Noise Bandwidth (-3dB)	120MHz	120MHz	120MHz	120MHz
Arbitrary		1μHz~50MHz	1μHz~40MHz	1μHz~50MHz	1μHz~40MHz
Frequency Resolution		1μHz			
Internal Frequency Reference Accuracy		±1ppm, 18~28℃			
Amplitude Range (50Ω)		≤20MHz: 1mVpp ~ 20Vpp			
		≤80MHz: 1mVpp ~ 5Vpp			
		≤110MHz: 1mVpp ~ 2Vpp			
		≤200MHz: 1mVpp ~ 1Vpp			
Amplitude Accuracy		Typical (1KHz sine wave, 0V offset, >10mVpp)			
		(±[1%±2mVpp] of setting)			
Modulation Modes		AM, FM, PM, 2ASK, 2FSK, 2PSK, BPSK, QPSK, 3FSK, 4FSK, OSK, PWM			
Modulation Source		Internal, external			
Operating Modes		Continuous, gated burst, frequency sweep, modulate			
Amplitude Units		Vpp, mVpp, Vrms, dBm (50 Ω impedance)			
Amplitude Resoltion		1mVpp			
Internal Reference Output Level		3.3Vpp			
Input Frequency Range		10MHz ± 50Hz			
Output Impedanc		50Ω, DC Coupling			
Frequency Counter	Measurement Fun	Frequency, period, positive/negative pulse width, duty cycle			
	Frequency Resolu	7 digits			
	Frequency Range	1μHz~80MHz			
	Gate Time	10ms~16s			
	Input Signal Rang	0~3.3V			
	Connectors	USB Host,USB Device		USB Host, USB Device, LAN	
Display		7 inch, 64K color, TFT LCD, 800 × 640			
Power Voltage		100-120VAC_{RMS} (±10%), 45Hz to 440Hz, CATII			
		120-240VAC_{RMS} (±10%), 45Hz to 66Hz, CATII			
Power Consumption		<30W			
Fuse		T, 0.25A, 250V, 5x20mm			
Temperature		Operating: 10 ° C to 40 ° C			
		Stoage: -20 ° C to 60 ° C			
Cooling Method		Fan cooling			
Operating Humidity		≤+104℉(≤+40℃): ≤ 90% relative humidity			
		106℉~122℉ (+41℃ ~50℃): ≤ 60% relative humidity			
Altitude		Operating: Below 3,000 meters			
		Non operating: Below 15,000 meters			
Dimension		318mm x 110mm x 150mm (W × H × D)			
Weight		3kg			

Digital Multimeter HDM3000 Series

6 ½ Digit, 35 ppm Basic DCV Accuracy

Product Features

- 6 ½ digit digital DMM with 0.1μV resolution;
- Front and rear input terminals provide ideal connection space for bend and system test;
- Fast reading speed up to 30,000 readings per second;
- Dual display allows clear and quick view of voltage and frequency measurements at the same time;
- Various measurements: ACV, DCV, ACI, DCI, 2-wire and 4-wire resistance, capacitance, frequency, period, diode, continuity, temperature;
- 4.3 inch 64K LCD display;
- True RMS AC (voltage & current) measurement;
- SCPI commands standard;
- Multiple connectivity options: USB2.0, serial interface RS-232/485, and LAN optional, GPIB optional.

Specification

Function		Range/Frequency	Test Current or Burden Voltage	24 Hours Tcal±1℃	90 Days Tcal±5℃	1 Year Tcal±5℃	Temperature Coefficient/℃
DC Voltage		100 mV	-	0.0030+0.0030	0.0040+0.0035	0.0050+0.0035	0.0005+0.0005
		1 V	-	0.0020+0.0006	0.0030+0.0007	0.0040+0.0007	0.0005+0.0001
		10 V	-	0.0015+0.0004	0.0020+0.0005	0.0035+0.0005	0.0005+0.0001
		100 V	-	0.0020+0.0006	0.0035+0.0006	0.0045+0.0006	0.0005+0.0001
		1000 V	-	0.0020+0.0006	0.0035+0.0010	0.0045+0.0010	0.0005+0.0001
True RMS AC Voltage (100mV, 1V, 10V, 100V and 750V ranges)		5 Hz–10 Hz	-	0.35+0.02	0.35+0.03	0.35+0.03	0.35+0.03
		10 Hz–20 KHz	-	0.04+0.02	0.05+0.03	0.06+0.03	0.005+0.003
		20 KHz–50 KHz	-	0.10+0.04	0.11+0.05	0.12+0.05	0.011+0.005
		50 KHz–100 KHz	-	0.55+0.08	0.60+0.08	0.60+0.08	0.060+0.008
		100 KHz–300 KHz	-	4.00+0.50	4.00+0.50	4.00+0.50	0.200+0.020
Resistance		100 Ω	1 mA	0.0030+0.0030	0.008+0.004	0.010+0.004	0.0006+0.0005
		1 KΩ	1 mA	0.0020+0.0005	0.008+0.001	0.010+0.001	0.0006+0.0001
		10 KΩ	100 µA	0.0020+0.0005	0.008+0.001	0.010+0.001	0.0006+0.0001
		100 KΩ	10 µA	0.0020+0.0005	0.008+0.001	0.010+0.001	0.0006+0.0001
		1 MΩ	5 µA	0.002+0.001	0.008+0.001	0.010+0.001	0.0010+0.0002
		10 MΩ	500 nA	0.015+0.001	0.020+0.001	0.040+0.001	0.0030+0.0004
		100 MΩ	500 nA ‖ 10 MΩ	0.300+0.010	0.800+0.010	0.800+0.010	0.1500+0.0002
DC Current		100 µA	<0.11 V	0.010+0.020	0.040+0.025	0.050+0.025	0.0020+0.0030
		1 mA	<0.11 V	0.007+0.006	0.030+0.006	0.050+0.006	0.0020+0.0005
		10 mA	<0.05 V	0.007+0.020	0.030+0.020	0.050+0.020	0.0020+0.0020
		100 mA	<0.5 V	0.010+0.004	0.030+0.005	0.050+0.005	0.0020+0.0005
		1 A	<0.7 V	0.050+0.006	0.080+0.010	0.100+0.010	0.0050+0.0010
		3 A	<2.0 V	0.180+0.020	0.200+0.020	0.200+0.020	0.0050+0.0020
		10 A	<0.5 V	0.050+0.010	0.120+0.010	0.120+0.010	0.0050+0.0010
Capacitance		1.0000 nF		0.50+0.50	0.50+0.50	0.50+0.50	0.05+0.05
		10.000 nF, 100.00 nF, 1.0000 µF		0.40+0.10	0.40+0.10	0.40+0.10	0.05+0.01
		100.00 µF		0.40+0.10	0.40+0.10	0.40+0.10	0.05+0.01
True RMS AC Current	100 µA, 1 mA, 10 mA, 100 mA Ranges	3 Hz–5 KHz	<0.011, <0.11	0.10+0.04	0.10+0.04	0.10+0.04	0.015+0.006
		5 KHz–10 KHz	<0.05, <0.5 V	0.10+0.04	0.10+0.04	0.10+0.04	0.030+0.006
	1 A Range	3 Hz–5 KHz	<0.7V	0.10+0.04	0.10+0.04	0.10+0.04	0.015+0.006
		5 KHz–10 KHz	<0.7V	0.10+0.04	0.10+0.04	0.10+0.04	0.030+0.006
	3 A Range	3 Hz–5 KHz	<5V	0.23+0.04	0.23+0.04	0.23+0.04	0.015+0.006
		5 KHz–10 KHz	<5V	0.23+0.04	0.23+0.04	0.23+0.04	0.030+0.006
	10 A Range	3 Hz–5 KHz	<0.5V	0.15+0.04	0.15+0.04	0.15+0.04	0.015+0.006
		5 KHz–10 KHz	<0.5V	0.15+0.04	0.15+0.04	0.15+0.04	0.030+0.006
Continuity		1 KΩ	-	0.002+0.030	0.008+0.030	0.010+0.030	0.0010+0.0020
Diode Test		5V	-	0.002+0.030	0.008+0.030	0.010+0.030	0.0010+0.0020
Temperature		PT100 (DIN/IEC751)		Probe accuracy+0.05 ℃			
		5 K Ω thermistor		Probe accuracy+0.1 ℃			

Model

Model	Digits of Resolution	Basic DCV Accuracy	Max. Reading Rate	Memory	Statistical Graphics	Input Terminals	Computer Interfaces
HDM3055	5 ½	75ppm	30,000 rdgs/s	10,000 readings	Histogram, bar chart, trend graph	Front-panel	USB, RS232/485
HDM3055S	5 ½	75ppm				Rear-panel	USB, RS232/485
HDM3055A	5 ½	75ppm				Front- panel, rear- panel	USB, RS232/485
HDM3055B	5 ½	75ppm				Front- panel, rear- panel	USB, RS232/485, LAN
HDM3055H	5 ½	75ppm				Front- panel, rear- panel	USB, RS232/485, LAN, GPIB
HDM3065	6 ½	35ppm				Front-panel	USB, RS232/485
HDM3065S	6 ½	35ppm				Rear-panel	USB, RS232/485
HDM3065A	6 ½	35ppm				Front- panel, rear- panel	USB, RS232/485
HDM3065B	6 ½	35ppm				Front- panel, rear- panel	USB, RS232/485, LAN
HDM3065H	6 ½	35ppm				Front- panel, rear- panel	USB, RS232/485, LAN, GPIB

DC Power Supply HDP4000 Series

245W Triple and Quadruple Output, Low-noise

DC Power Supply

Product Features

- Exallent programming/readback accuracy;
- Electrically isolated channels;
- Individual on/off on all channels;
- 4.3-inch LCD color dispaly;
- Low output ripple and noise;
- Fast transient response time: ≤50μs;
- Over voltage, over current and over temp protection;
- Color-coded channels;
- List mode;
- USB, LAN, Optional RS232/RS485 and GPIB connectivity;
- SCPI remote command control.

Specification

Model		HDP4324	HDP4324B	HDP4324H	HDP4424	HDP4424B	HDP4424H	
DC Output Rating (0 to 40° C)		CH1	CH2	CH3	CH1	CH2	CH3	CH4
		0-32V	0-32V	0-8V	0-32V	0-32V	0-8V	0-16V
		0-3.2A	0-3.2A	0-5A	0-3.2A	0-3.2A	0-2A	0-1.5A
Series Mode Voltage			64V			64V		
Parallel Mode Current			6.4A			6.4A		
Power Output		245W						
Load Regulation ± (% of output + offset)	Voltage	<0.01%+2mV						
	Current	<0.01%+250μA						
Line Regulation ± (% of output + offset)	Voltage	<0.01%+2mV						
	Current	<0.01%+250μA						
Output Ripple and Noise (20 Hz to 20 MHz)	Normal mode voltage	<350μVrms / 2mVpp						
Accuracy 12 months (23 °C ± 5 °C)		0.05%+10mV		0.1%+5mV	0.05%+10mV		0.1%+5mV	
Programming Accuracy ± (% of output + offset)	Voltage							
	Current	0.2%+5mA		0.1%+10mA	0.2%+5mA		0.1%+10mA	
Readback Accuracy ± (% of output + offset)	Voltage	0.05%+10mV		0.1%+5mV	0.05%+10mV		0.1%+5mV	
	Current	0.2%+5mA		0.1%+10mA	0.2%+5mA		0.1%+10mA	
Load Transient Recovery Time (Time to recover to within the settling band following a load change from 50% to 100% and from 100% to 50% of full load)	Voltage settling band	15mV						
	Time	< 50 μS						
AC Input		100, 115, or 230 V input (±10%), 50/60 Hz (Maximum 250Vac)						
Digital I/O port		Available	Available	Available	Available	Available	Available	
Connectivity	USB	Available	Available	Available	Available	Available	Available	
	LAN	Available	Available	Available	Available	Available	Available	
	RS232/485	Not Available	Available	Available	Not Available	Available	Available	
	GPIB	Not Available	Not Available	Available	Not Available	Not Available	Available	
Cooling Method		Air-cooled						
Operating Temperature Range		0 to 50 °C						
Storage Temperature		− 40 to 70 °C						
Relative Humidity		0 to 50 °C: ≤95% 30 to 40 °C: ≤75% 40 to 50 °C: ≤45%						
Altitude		Up to 3, 000 meters						
Dimensions		232 x 153 x 392 mm						
Weight		9.15 kg			9.45 kg			

DC Power Supply HDP10000 Series

210/180W, Single Output, Low Noise

Product Features

- 10mV/1mA resolution, LED display to indicate 4 digits voltage and current simultaneously;
- With 5-12V output quick charging USB interface;
- Memory for up to 10 setups;
- Optional input AC voltage selector, 115V/230V switch;
- Computer control via RS232, programmable (optional);
- Over voltage, over current, over temperature and short circuit protection;
- Quiet operation;
- Safety interlock;
- Up to 8A or 80V output;
- Low output ripple and noise.

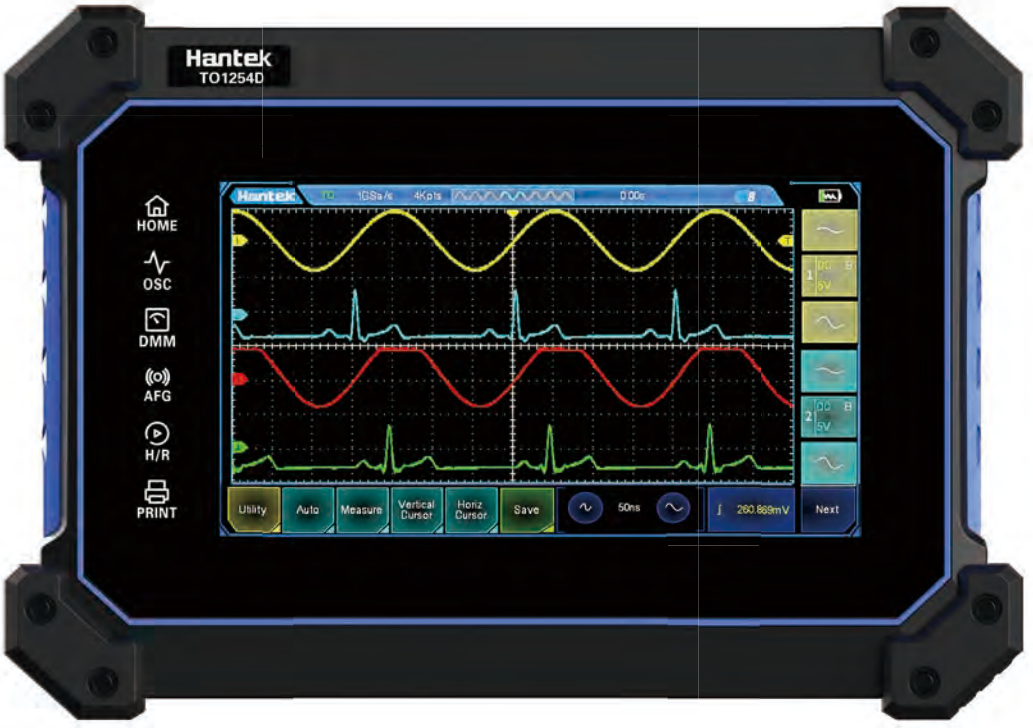
Specification

Model		HDP135V6A	HDP135V6B	HDP135V6	HDP135V6S	HDP180V8S	HDP1160V4S
Power Output		210W				180W	
DC Output Rating (0 to 40° C)		0-35V				0-80V	0-160V
		0-6A				0-8A	0-4A
Load Regulation	Voltage	≤0.1% + 5mV					
	Current	≤0.2% + 3mA					
Line Regulation	Voltage	≤0.01% + 5mV					
	Current	≤0.2% + 3mA					
Setting Resolution	Voltage	10mV					10mV (0-100V) 100mV(100-160V)
	Current	1mA					
Setting Accuracy	Voltage	≤0.1% + 1 digits					
	Current	≤0.2% + 3mA					
Readback Resolution	Voltage	10mV					10mV (0-100V) 100mV(100-160V)
	Current	1mA					
Readback Accuracy	Voltage	≤0.1% + 1 digits					
	Current	≤0.2% + 3mA					
Ripple	Voltage	10mVRMS					15mVRMS
	Current	5mARMS				8mARMS	10mARMS
Over Voltage Protection (OVP)		0-37V ± 0.2% FS				0-88V ± 0.2% FS	0-176V ± 0.2% FS
Over Current Protection (OCP)		0-7A ± 0.2% FS				0-88A ± 0.2% FS	0-4.4A ± 0.2% FS
Max. Output Voltage		35.2V ± 0.2%				81V ± 0.2%	162V ± 0.2%
Max. Output Current		6.2A ± 0.2%				8.2A ± 0.2%	4.1A ± 0.2%
Quick Charging	Output Voltage Range	5 - 12V					
	Output Power	Max. 18W					
	Protocol	DCP (Apple, Samsung and BC1.2), QC2.0/QC3.0 (Qualcomm), FCP (Huawei), AFC (Samsung)					
AC Input		220 VAC ±10%, 50/60 Hz	110 VAC ±10%, 50/60 Hz	110 VAC ±10% / 220 VAC ±10%, 50/60 Hz			
Connectivity	RS232	Not Available			Available		
Cooling Method		Air-cooled					
Operating Conditions		-10 to 40 °C: ≤80% relative humidity					
Storage Temperature		-20 to 60 °C: ≤80% relative humidity					
Dimensions		85 x 160 x 260 mm					
Weight		1.3 kg				1.9 kg	

Tablet oscilloscope TO1000 Series

250MHz Bandwidth, 8M Memory Depth, 1GSa/s Sampling Rate

Table Oscilloscope



Product Features

- With optional digital multmeter with record function to monitor voltage, current, resistor data changing;
- 7-inch capacitive touch screen, 800×480 resolution, intuitive touch interface makes it easy to user;
- 110-250MHz bandwidth with 2 or 4 channels, 1GSa/s sampling rate, 8M memory depth;
- USB2.0 device interface, support removeable storage device;
- Up to 25MHz output 1 channel arbitrary waveform generator (optional);
- One key save ensure quick and simple waveform data storge;
- With rechargable 1,000mAh lithium battery;
- USB Type C interface for charging and remote control;
- Adjustable mounted on and off kickstand, anti-shock PTE protective corner, make it easy for bench on field measurement.

Specification

Series	TO1000 Series (1GSa/s)	TO1112 Series (250MSa/s)
Channels	2 or 4	2
Bandwidth	150MHz, 200MHz, 250MHz	110MHz
Sampling Rate	1GSa/s single channel, 500MSa/s dual channels, 250MSa/s all channels	250MSa/s single channel
Memory Depth	8Mpts single channel	
Acquisition Mode	Normal, average, peak, high resolution (HR)	
Vertical Resolution	8 bits	
Vertical Sensitivity	1 MΩ: 2mV/div ~ 10 V/div	1 MΩ: 10mV/div ~ 10 V/div
Time Base Range	2 ns/div~100 s/div	
DC Gain Accuracy	±3% full scale	
Bandwidth Limit	20 MHz (selectable for each channel)	
Trigger Types	Edge, pulse width, slope, video, timeout	
Math	Add, subtrace, multiply, divide, FFT	
Auto Measurements	41 automated measurements, with statistics	
Input Coupling	DC, AC or GND	
Input Impedance	1 MΩ ± 1% ≈ 21 pF ± 3 pF	
Waveform Generator	Sampling rate: 200 MSa/s Vertical resolution: 12 bits Max. output frequency: 25 MHz Waveforms: sine, square, triangle, noise, DC, arbitrary	
Multimeter	Max. Resolution: 4000 points Measurement mode: voltage, current, resistance, capacitance, diode, continuity	
Power Adapter	Input: 100-240VAC, 50-60Hz Output: 5VDC 3A, 9VDC 2A, 12VDC 1.5A Support fast charging	
Battery	Lithium 3.7V 10,400mAh	Lithium 3.7V 5,200mAh
	Operating time ≥ 3 hours	
Dimensions	248mm x 176mm x 54mm (L x W x H)	
Weight	1.2kg(including battery)	
Display	7-inch capacitive multi-touch	

Model

Model	Channels	Bandwidth	Sampling Rate	Memory	Battery Capacity	Multmeter	Waveform Generator
TO1112	2CH	110MHz	250MSa/s	8Mpts	3.7V 5,200mAh Lithium rechargeable battery pack 3.7v 10,400mAh	--	--
TO1112C	2CH	110MHz	250MSa/s	8Mpts		4000 points	--
TO1112D	2CH	110MHz	250MSa/s	8Mpts		4000 points	25MHz, 1CH
TO1152C	2CH	150MHz	1GSa/s	8Mpts		4000 points	--
TO1202C	2CH	200MHz	1GSa/s	8Mpts		4000 points	--
TO1252C	2CH	250MHz	1GSa/s	8Mpts		4000 points	--
TO1152D	2CH	150MHz	1GSa/s	8Mpts		4000 points	25MHz, 1CH
TO1202D	2CH	200MHz	1GSa/s	8Mpts		4000 points	25MHz, 1CH
TO1252D	2CH	250MHz	1GSa/s	8Mpts		4000 points	25MHz, 1CH
TO1154C	4CH	150MHz	1GSa/s	8Mpts		4000 points	--
TO1204C	4CH	200MHz	1GSa/s	8Mpts		4000 points	--
TO1254C	4CH	250MHz	1GSa/s	8Mpts		4000 points	--
TO1154D	4CH	150MHz	1GSa/s	8Mpts		4000 points	25MHz, 1CH
TO1204D	4CH	200MHz	1GSa/s	8Mpts		4000 points	25MHz, 1CH
TO1254D	4CH	250MHz	1GSa/s	8Mpts		4000 points	25MHz, 1CH

Handheld Oscilloscope

Hantek2000 Series

70MHz Bandwidth, 250MSa/s Sample Rate, DSO + DMM + AWG

Handheld Oscilloscope

Product Features

- Oscilloscope + Multimeter + Arbitrary waveform generator;
- Oscilloscope: 70MHz/40MHz bandwidth, 2 channels;
- Automatic measuring function;
- Multimeter: AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Diode, On-off test;
- Generator: Up to 25MHz frequency output, waveforms built-in including 4 standard waveforms and 4 editable arbitrary waveforms;
- 320 × 240 TFT color LCD display, built-in 5,200mAh lithium battery support 5 hours long field work.

Specification

Model	Hantek2D72	Hantek2D42	Hantek2C72	Hantek2C42
Channels	2			
Bandwidth	70MHz	40MHz	70MHZ	40MHz
Sample Rate	250MSa/s (Single-channel), 125MSa/s (Full-channel)			
Time Modes	YT, XY, Roll			
Vertical Scale	10 mV/div~10V/div			
Coupling	DC, AC, GND			
Input Impedance	1MΩ ± 2% ≈ 25pF ± 3pF			
Probe Attenuation Factors	1X, 10X, 100X, 1000X			
Max. Input Voltage	150Vrms			
Timebase Range	5ns/div ~ 500s/div (1-2-5 sequence)			
Memory Depth	Max. 6K			
Vertical Resolution	8 bits			
Bandwidth Limit	20MHz			
Rise Time	≤5ns	≤8.75ns	≤5ns	≤8.75ns
Trigger Source	CH1, CH2			
Trigger Mode	Auto, Normal, Single			
Trigger Type	Edge			
Triggered Range	±4 div from center of screen			
Cursor Measure	Voltage difference between cursors ΔV; Time difference between cursors ΔT			
Automatic Measurements	Maximum, Minimum, Frequency			
Generator	Max. Frequency	25MHz		
	Sample Rate	250MSa/s		
	Frequency Resolution	0.1%		
	Waveform Output	1		
	Waveform Length	512Sa		
	Amplitude Range	2.5Vpp (50Ω); 5Vpp (High impedance)		
DMM	Resolution	4,000 counts		
	Modes	DC Voltage, AC Voltage, DC Current, AC Current, Resistance, Capacitance, Diode & On-Off		
	Max. Input Voltage	AC: 600V, DC: 600V		
	Min. Input Current	AC: 10A, DC:10A		
	Input Impedance	10MΩ		
Temperature	Operating: 0℃ to 40℃; Non-operating: -20℃ to +60℃			
Humidity	< 35℃, ≤ 90% relative humidity; 35℃ ~ +40℃, ≤60% relative humidity			
Dimensions	199mm × 98mm × 41mm (L × W × D)			
Weight	0.8kg			

Model

Model	Channels	Bandwidth	Sample Rate	Memory Depth	Battery Capacity	DMM	Waveform Generator
Hantek2C42	2	40MHz	250MSa/s	6Kpts	3.7V 5,200mAh Lithium rechargeable battery pack	4,000 counts	--
Hantek2C72	2	70MHz	250MSa/s	6Kpts		4,000 counts	--
Hantek2D42	2	40MHz	250MSa/s	6Kpts		4,000 counts	25MHz, 1 Output
Hantek2D72	2	70MHz	250MSa/s	6Kpts		4,000 counts	25MHz, 1 Output

Hardness Tester HT360 Series

Portable Leeb Hardness Tester

Product Features

- Smart, robust, repetitive, easy to use;
- 320 × 240 color LCD display, with backlight. Direct display measurement result, time count, average, direction;
- Standard type D impact device. Optional type DC, DL, D+15, G impact device;
- Connect to PC via USB Type-C. 500 groups measurement data memory can be stored and transfered to PC or printer via optional bluetooth;
- Operate on the Leeb dynamic method and be used to measure the hardness in most metals including steel, cast steel, alloy tool steel, stainless steel, gray cast iron, spheroid iron, cast aluminum, brass, bronze, pure copper, forged steel etc;
- Corverts from HL to selected hardness units (HB, HS, HV, HRA, HRB, HRC);
- Automatic power off. Battery capacity display.

Specification

Model		HT360	HT306C
Bluetooth		N/A	Standard
Display		2.8-inch TFT LCD	
Language		Chinese/English	
Impact Device		D (DC, DL, D+15, C, G)	
Measuring Range		(170~960) HLD, (17.9~69.5) HRC	
Accuracy Measuring		±6 (for HLD=760±30)	
Direction		↓↘→↗↑	
Hardness Units		HL (Leeb), HB (Brinell), HS (Shore), HV (Vickers), HRA (Rockwell A), HRB (Rockwell B), HRC (Rockwell C)	
Data Storage		500 groups (relative to impact times 32-1)	
Power	Battery	3.7V 2,600mAh 18650 Lithium batteries (2pcs)	
	AC Adapter	Input: 100~240VAC; Output: 5VDC, 2A	
Dimensions		200 × 98 × 40mm (L × W × D)	
Weight		600g (including battery)	

LCR Meter

Hantek1000C

100Hz/120Hz/1KHz/10KHz/40KHz

LCR Meter

Product Features

- Be able to measure at frequencies as high as 100KHz;
- 0.0001 D/Q resolution. 0.1% basic accuracy;
- 320 × 240 TFT color LCD display. Rechargable lithium batteries last up to 10 hours.

Specification

Model	Hantek1832C	Hantek1833C
Measurements	Primary parameter: L/C/R/Z Secondary parameter: X/D/Q/θ/ESR	
Inductance Range	0μH~999.9H	
Capacitance Range	0pF~20.000mF	
Resistance Range	0Ω~20.000MΩ	
Test Frequency	100Hz, 120Hz, 1KHz, 10KHz, 40KHz	100Hz, 120Hz, 1KHz, 10KHz, 40KHz, 50KHz, 75KHz, 100KHz
Test Signal Level	0.6Vrms	0.3Vrms, 0.6Vrms
Measurement Circuit	Series or Parallel selectable	
Ranging Mode	Manual, Auto	
Test speed	Fast, Medium, Slow	
Test Terminals	3 wire or 5 wire measurement available	
Corrections	Open and short corrections	
Interface	USB Type C	
Max. Reading	39,999	
Output Impedance	100Ω	
Best Accurary	Resistance: 0.25% , Capacitance: 0.4%	
Display	320 × 240 TFT LCD	
Power Source	Lithium battery 3.7V/2,600mAh (2pcs) or DC 5V/2A (through AC adapter or USB cable)	
Dimension & Weight	199 × 98 × 40mm (L × W × D), 600g	

Temperature Data Logger

HTM200 Series

8 Channels, 11 Thermocouple Types

Product Features

- Adjustable auto power off timer. Both text display and graph diaplay are available;
- Built-in rechargeable lithium battery. Isolated input protection up to 300 VDC between any two channels;
- 320 × 240 TFT LCD. Display all channels simultaneously;
- Compatible with Type K, J, T, E, B, N, R, S, A, C, D thermocouple probes to provide a wide range of temperature measurements;
- Standard USB storage memory expansion, optional SD card momery;
- Temperature alarm function. Programmable alarm;
- Standard USB (Type-C) communication, optional wireless comnunication using either bluetooth or 4G (fourth-generation wireless);
- The application can be downloaded and installed on mobile device with Windows or Android OS;
- Data can also be downloaded to a PC with a USB cable. SCPI remote command control;
- Widely applied in constructions, logistic business, electronic components measurements and other industries.

Specification

Parameters	
Input Type	J, K, T, E, S, N, B, R, A, C, D
Temperature Accurary Type K (Excluding Thermocouple Tolerance)	-200℃ to 0℃: ± 1.2℃
	0℃ to 1,370℃ ± 0.8℃
Input Temperature Range	Type K: -200℃ to 1,370℃
Resolution	0.1℃
Calibration	User single point offset calibration is available for all channels
CJC (Cold Junction Compensation) Accuracy	0.5℃
Software Compatible OS	Android, Windows
Data Interface	USB-Type C (standard), Bluetooth or 4G (optional)
Maximum Input Voltage	±75VDC
Input Connector Type	E0308 plug-in 16-pin terminal blocks
Display	2.8 inch TFT-LCD with adjustable backlight
Language	Chinese and English
Operating and Storage Environment	Operating Condition: 0~40℃, <80% RH; Storage Condition: -10~60℃, <90% RH
Power Source	DC 5V 2A through AC adapter or USB cable Lithium battery 3.7V 2,600mAh (2pcs)
Battery Life	>15 hours
Weight	600g
Dimensions	200mm × 98mm × 40mm (L × W × D)

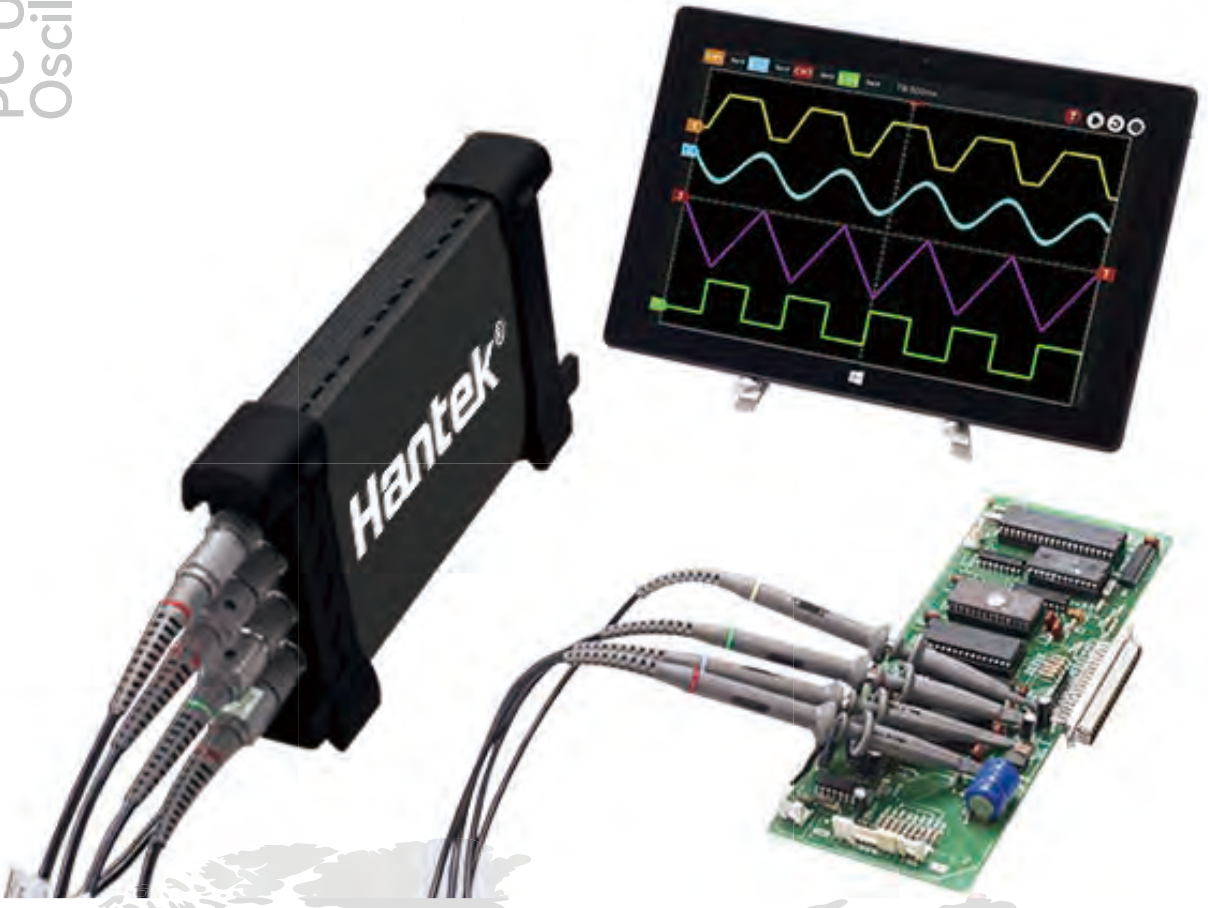
Model

Model	Channels	USB	Bluetooth	SD Card	4G Wireless	Input Type
HTM204B	4	Support	N/A	N/A	N/A	J/K/T/E/S/N/B/R/A/C/D
HTM208B	8	Support	N/A	N/A	N/A	J/K/T/E/S/N/B/R/A/C/D
HTM204C	4	Support	Support	Support	N/A	J/K/T/E/S/N/B/R/A/C/D
HTM208C	8	Support	Support	Support	N/A	J/K/T/E/S/N/B/R/A/C/D
HTM204D	4	Support	Support	Support	Support	J/K/T/E/S/N/B/R/A/C/D
HTM208D	8	Support	Support	Support	Support	J/K/T/E/S/N/B/R/A/C/D

PC USB Oscilloscope | Hantek6000 Series

4CH, 250MHz, 1GSa/s

PC USB Oscilloscope



Product Features

- Affordable and portable with 4 channels. 70~250MHz bandwidth. 1GSa/s real time sampling rate;
- Four math operations and FFT. Built-in frequency counter. Serial decode/trigger options for UART, LIN, CAN, IIC, SPI;
- Plug-and-play USB 2.0 interface, no external power required;
- 20 automatic measurements, Pass/Fail test;
- OS: Windows 7, Windows 8, Windows 10, Windows 11.

Specification

Model	Hantek6254BD	Hantek6204BD	Hantek6104BD	Hantek6074BD
Channels	4			
Bandwidth	250MHz	200MHz	100MHz	70MHz
Sampling Rate	1GSa/s single channel, 500MSa/s dual channel, 250MSa/s all channels			
Memory Depth	64K			
DC Gain Accuracy	±3%			
Vertical Resolution	8 bits			
Vertical Sensitivity	2mV/div ~ 10 V/div			
Time-base Range	2ns/div~1, 000s/div			
Time-base Accuracy	±50 ppm			
Bandwidth Limit	20 MHz			
Trigger Selections	Edge, Pulse, Video, Alternative			
Math Functions	+, -, x, ÷, FFT			
Auto Measurements	Maximum, Top, RMS, Mean, Minimum, Middle, Amplitude, Cycle Mean, Peak to Peak, Base, Positive Overshoot, Negative Overshoot, Period, Rise Time, +Duty Cycle, +Pulse Width, Frequency, Fall Time, -Duty Cycle, -Pulse Width			
Cursors Modes	Cross, Trace, Horizontal, Vertical			
Input Coupling	DC, AC or GND			
Input Impedance	1 MΩ; 25pF			
Waveform Generator	Output Channel: 1 Vertical Resolution: 12 bit Max. Frequency: 25 MHz Amplitude Range: 0~3.5Vpp Waveform Length: 2Kpts Output Impedance: 50Ω			
Power Requirement	+5VDC, 1A			
Remote Interface	USB 2.0			
Dimensions & Weight	175 × 105 × 25 mm (L × W × D); 450g			

Model

Model	Channels	Bandwidth	Sampling Rate	Memory Depth	Voltage Range	Automotive Guided Tests	Generator
Hantek6254BD	4	250MHz	1GSa/s	64Kpts	2mV~10V	--	25MHz,1Output
Hantek6204BD	4	200MHz	1GSa/s	64Kpts	2mV~10V	--	25MHz,1Output
Hantek6104BD	4	100MHz	1GSa/s	64Kpts	2mV~10V	--	25MHz,1Output
Hantek6074BD	4	70MHz	1GSa/s	64Kpts	2mV~10V	--	25MHz,1Output
Hantek6254BC	4	250MHz	1GSa/s	64Kpts	2mV~10V	--	--
Hantek6204BC	4	200MHz	1GSa/s	64Kpts	2mV~10V	--	--
Hantek6104BC	4	100MHz	1GSa/s	64Kpts	2mV~10V	--	--
Hantek6074BC	4	70MHz	1GSa/s	64Kpts	2mV~10V	--	--
Hantek6022BL	2	20MHz	48MSa/s	1Mpts	10mV~5V	--	--
Hantek6022BE	2	20MHz	48MSa/s	1Mpts	10mV~5V	--	--
DSO3254A	4	250MHz	1GSa/s	128MKpts	1mV~10V	--	25MHz,1Output
DSO3204A	4	200MHz	1GSa/s	128MKpts	1mV~10V	--	25MHz,1Output
DSO3104A	4	100MHz	1GSa/s	128MKpts	1mV~10V	--	25MHz,1Output
DSO3254	4	250MHz	1GSa/s	128MKpts	1mV~10V	--	--
DSO3204	4	200MHz	1GSa/s	128MKpts	1mV~10V	--	--
DSO3104	4	100MHz	1GSa/s	128MKpts	1mV~10V	--	--
Hantek6074BE	4	70MHz	1GSa/s	64Kpts	2mV~10V	82	--
Hantek6104BE	4	100MHz	1GSa/s	64Kpts	2mV~10V	82	--
Hantek6204BE	4	200MHz	1GSa/s	64Kpts	2mV~10V	82	--
Hantek6254BE	4	250MHz	1GSa/s	64Kpts	2mV~10V	82	--
Hantek1008C	8	100KHz	2.4MSa/s	4Kpts	10mV~5V	82	--

Automotive Oscilloscope

Hantek2D82AUTO

2 CH, 80MHz Oscilloscope, DMM, AWG

Automotive Oscilloscope

Product Features

- With more than 80 automotive guided tests. Quickly learn how to test vehicle with the help video by scanning the QR code on the device's rear;
- First test projects: Intake manifold vacuum degree & ignition, lampblack adjustment valve vacuum degree & ignition, exhaust ignition (idle), exhaust ignition (start);
- Start & Charge: Charging circuit, current and voltage;
- Actuator: Gasoline / Diesel;
- Communication networks: CAN bus data observation, CAN bus signal integrity, CAN bus LH long-term acquisition, LIN bus;
- Sensors: Air flow meter, camshaft, crankshaft, distributor, lambda sensor, throttle position;
- Ignition: Primary/Secondary;
- Wide input sensitivity range: 10mV-10V/div;
- 80MHz bandwidth, 250M sampling rate;
- With 3½ digit multimeter which can be used to measure AC/DC voltage, AC/DC current, resistance, diode, capacitance, and continuity;
- You can edit and download a wave like PWM wave to the built-in waveform generator to output and display on its oscilloscope.

Specification

Model		Hantek2D82AUTO	
Support Test	Ignition	Primary Ignition	Primary Ignition (Voltage), Primary Ignition (Current), Primary Ignition (Voltage & Current), Primary Ignition & Crankshaft Sensor, Primary Ignition & Secondary Ignition, Primary Ignition & Injector & Crankshaft & Camshaft
		Secondary Ignition	Distributor Pick-up (Hall Effect), Distributor Inductive Pick-up Cranking, Distributor Inductive Pick-up Running
	Sensors	ABS Sensor	Lambda Sensor Titania, Lambda Sensor Zirconia, Lambda Sensor Zirconia Pre & Post Cat
		Air Flow Meter	Air Flow Meter (Hot Wire), Air Flow Meter (Air Vane), Air Flow Sensor (Bosch Diesel), Air Intake Pressure Sensor (Bosch Diesel)
		Camshaft	Camshaft (Inductive), Camshaft (AC Excited), Camshaft (Hall Effect), Camshaft (Bosch Common Rail Diesel), Crankshaft & Camshaft Sensor
		Coolant Temperature	Coolant Temperature (5V), Coolant Temperature (GM/Vauxhall Simtec)
		Crankshaft	Crankshaft Inductive Running, Crankshaft Inductive Cranking, Crankshaft Hall Effect, Crankshaft Sensor & Primary Ignition
		Distributor	Distributor Pick-up (Hall Effect), Distributor Inductive Pick-up Cranking, Distributor Inductive Pick-up Running
		Lambda Sensor	Lambda Sensor Titania, Lambda Sensor Zirconia, Lambda Sensor Zirconia Pre & Post Cat
		MAP Sensor	MAP Analog, MAP Digital
		Throttle Position	Throttle Position Potentiometer, Throttle Position Switch, Throttle Pedal Switch (Bosch Diesel)
		Other Sensors	Accelerator Pedal (Bosch Diesel), Crash Sensor, Hall Effect Road Speed Sensor, Knock Sensor
	Network	CAN L&H	CAN Bus Data View, CAN Bus Signal View, CAN Bus LH Long Capture
		LIN Bus	LIN Bus Engnie Off Disgnosis
		Others	K-Line, FlexRay
	Engine	Petrol	Single-point Injector (Voltage), Single-point Injector (Current), Multi-point Injector (Voltage), Multi-point Injector (Current), Injector Voltage & Current, Injector Current & Primary Ignition
		Diesel	Common Rail Diesel (Current), Injector Bosch CDi 3 (Current), Injector Bosch Diesel (Idling), Injector Bosch Diesel (Accelerating)
	Startup & Charge	Charging Circuits	Charging Circuits Current/Voltage, Charging Circuits Current/Voltage Starting 24V, Charging Circuits Current/Voltage Idling 24V, Charging Circuits Alternator AC Ripple/Diode Diagnosis
		Relative Compression	Relative Compression Petrol, Relative Compression Diesel, Starting Voltage Drop
Oscillioscope	Channels	2	
	Bandwidth	80MHz	
	Sample Rate	250MSa/s all channels, 125MSa/s half channel	
	Time Base Range	5ns/div - 500s/div (1-2-5 sequences)	
	Inuput Sensitivity	10mV/div - 10V/div at BNC inupt	
	Max. Input Voltage	150V_{RMS}	
Generator	Output Channel	1	
	Output Waveforms	Sine, Square, Triangle, Arbitrary	
	Max. Frequency	25MHz	
	Amplitude	2.5Vpp (50Ω), 5Vpp (High impedance)	
DMM	Max. Resolution	4, 000 Counts	
	Testing Modes	Voltage, Current, Resistance, Capacitance, Diode, On-Off	
	Max. Input Voltage	AC: 600V, DC: 800V	
	Max. Input Current	AC: 10A, DC: 10A	
	Inuput Inpedance	10MΩ	
General	Power Supply	AC Adapter	Input: 100V-240VAC, 50Hz-60Hz; Output: 5VDC, 2A
		Battery	Lithum battery 3.7V 2, 600mA x 2
	Dimensions	199 x 98x 40mm (L x W x D)	
	Weight	400g	

Standard Accessories

Model	Hantek2D82AUTO I	Hantek2D82AUTO II	Hantek2D82AUTO III
Power Adapter, Type C Cable, Multimeter Probe	1	1	1
Alligator Clip HT324	2	2	2
Auto test Leads HT30B	1	2	2
Auto Ignition Probe HT25	1	2	2
Acupuncture Probe Set HT307	1	1	2
COP Extension Cord HT308	1	2	2
20:1 Attenuator HT201	1	2	2
Large Dolphin/Gator Clips HT18A	1	1	2
Breakout Leads HT301	--	--	--
6 Way Breakout Leads HT306 (2.8mm)	--	1	1
6 Way Breakout Leads HT306 (2.3mm)	--	--	1
6 Way Breakout Leads HT306 (1.5mm)	--	--	1
6 Way Breakout Leads HT306 (1.0mm)	--	--	1
65A AC/DC Current Clamp CC65	--	--	1
650A AC/DC Current Clamp CC650	--	--	1

Battery Tester HT2018B

Lead Acid Battery Checker

Battery Tester

Product Features

- Multiple rating system;
- Coverage: CCA, IEC, EN, DIN, JIS;
- It can detect the charging system status of 6V, 12V, and 24V lead-acid battery;
- Displays battery condition like good, general, replace etc;
- Tests the batteries on the vehicle directly, no need to remove the battery;
- Complete accurately test results in seconds;
- Rubberized sleeve protects 60cm tester cable with metal alligator clips;
- Easily read out electrical capacity and physical condition to estimate lifecycle;
- Automatic safety protections against sparks, reverse connections, over voltage and over-heating to ensure no damage would occur during usage;
- Battery health test: cold cranking voltage, state of health (SDH), starting battery's capability, CCA, voltage, internal resistance, cranking voltage, loaded voltage, etc;
- Applications for a broad array of vechicles, such as cars, trucks, aquatic vehicles, agricultural machinery, motorcycles, bus etc.

Specification

Model		HT2018B
Battery Rating System	CCA (Cold Cranking Amps)	100~1700
	IEC (International Electrotechnical Commission)	100~1000
	EN (Europe-Norm)	100~1700
	DIN (Destsche Industrie-Norm)	100~1000
	JIS (Japanese Industry Standard)	100~1700
Battery Internal Resistance		0.00mΩ~99.99mΩ
Battery Voltage		4.5V~30V
Load Test		Available
Cranking Test		Available
Charging Test		Available
Battery Health Test		Available
Reverse Connection Protection		Available
LCD Display		2'' Backlight
Cable Length		600mm
Dimension		143 × 77 × 28（mm）
Weight		270g

Test Accessories

65A AC/DC Current Clamp

CC-65

650A AC/DC Current Clamp

CC-650

800A AC/DC Current Clamp

CC-800

20:1 Attenuator

HT201

Signal Probe for Coil-on-Plug

HT25COP

Signal Probe for Coil-on-Plug

HT20COP

Auto Ignition Probe

HT25

Coil-on-Plug Extension Cord

HT308

Mini Test Hook

HT321

Acupuncture Probe Set

HT307

Auto Test Cable

HT30A

Coating Thickness Gauge

HT890B