





# The Never Ending Pursuit Since 1988

## About Us

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UNI-T was founded in 1988 and officially registered as UNI-Trend (China) Technology Co., Ltd. In 2003. We design and manufacture test and measurement solutions. Over the years, we have striven to be the technology pioneer and professional solution provider for the community with a sustainable shared future. UNI-T have been committed to the innovation of electronic testing and measurement industry, and as a well-established brand in the test and measuring industry, we serve a wide-range of customers in Education and Scientific Research, Industrial Automation, Automobile, Transportation, Energy, Semi-conductors, Network and Communications, Medical, Environmental protection and more. The company went public in SSE STAR (Sic-Tech Innovation Board) stock market in Feb. 2021 (code: 688628)

## R&D focused

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With 3 R&D centers in Dongguan, Chengdu and Changzhou, and over 200 experienced R&D engineers ensuring the competitive edge of UNI-Trend Group to provide reliable, innovative and cost-effective products to the market. The proprietary factory floor space is 100,000 square meters with annual manufacturing capacity over 10 million units. We are the testing specialists providing solutions to help our partners and customers around the world.

## Wide-Range Production Line

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As a growing company with solutions that span multiple sectors, there's a lot to talk about UNI-Trend Group. We got four major product lines: Test & Measurement Instruments, Field Measurement Instruments, Thermal Imagers and Environmental Testers. With extensive applications in industries and fields, you can count on UNI-T on the tasks from R&D to facility/equipment maintenance. Our Test & Measurement Instruments portfolios includes Signal Analyze, RF & Microwave, Power Electronic, Passive components and Safety Testers.

## Customer-Centric Sales

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UNI-T's worldwide partners in over 80 countries provide our customers timely services whereas needed. We collaborate with our partner closely on not only product and technical aspects but also channel and business topics to ensure the customer satisfaction. In collaboration with partners, UNI-T strive to maintain the best quality products and service for scientists, engineers and technicians around the world for future success.

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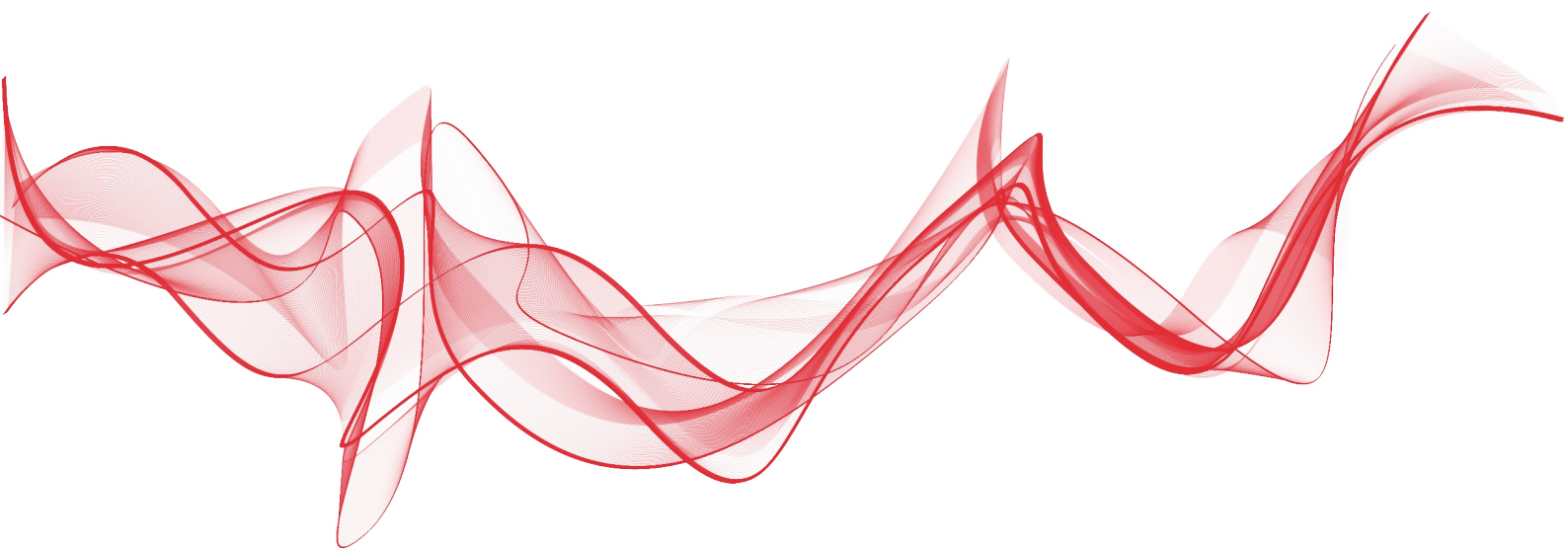
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# DIGITAL OSCILLOSCOPES

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Selection Guide

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Digital Storage Oscilloscopes

— MSO/UP03000E Series **NEW**

— UP02000E Series

— UP01000E Series **NEW**

— UTD2000CEX+Series

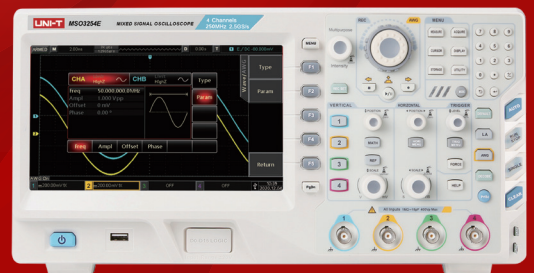
— UTD2000CL/CL+ Series

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— UTD1000C Series

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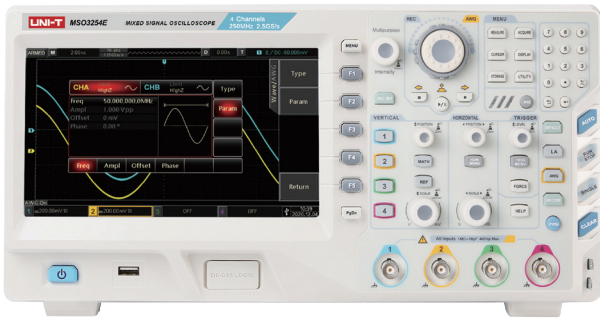


# Selection Guide

Series	Model	Channels	Memory depth	Sampling rate	Bandwidth (MHz)												
					500	350	250	200	150	100	70	60	50	25			
MSO/UP03000E	MSO/UP03504E	4+16Digit/4	70Mpts	2.5GSa/s	●												
	MSO/UP03502E	2+16Digit/2	70Mpts	2.5GSa/s	●												
	MSO/UP03352E	4+16Digit/4	70Mpts	2.5GSa/s		●											
	MSO/UP03354E	2+16Digit/2	70Mpts	2.5GSa/s		●											
	MSO/UP03254E	4+16Digit/4	70Mpts	2.5GSa/s			●										
	MSO/UP03252E	2+16Digit/2	70Mpts	2.5GSa/s			●										
	MSO/UP03154E	4+16Digit/4	70Mpts	2.5GSa/s					●								
	MSO/UP03152E	2+16Digit/2	70Mpts	2.5GSa/s					●								
UP02000E	UP02104E	4	56Mpts	1GSa/s						●							
	UP02102E	2	56Mpts	1GSa/s						●							
	UP02074E	4	56Mpts	1GSa/s							●						
	UP02072E	2	56Mpts	1GSa/s							●						
UP01000E	UP01202E	2	56Mpts	1GSa/s				●									
	UP01102E	2	56Mpts	1GSa/s						●							
UTD2000CEX+	UTD2202CEX+	2	64Kpts	1GSa/s				●									
	UTD2102CEX+	2	64Kpts	1GSa/s						●							
	UTD2052CEX+	2	25Kpts	1GSa/s											●		
UTD2000CL+/CL	UTD2152CL	2	64Kpts	500MSa/s					●								
	UTD2102CL+	2	64Kpts	500MSa/s						●							
	UTD2052CL+	2	64Kpts	500MSa/s											●		
	UTD2072CL	2	64Kpts	500MSa/s								●					
UTD1000C	UTD1202C	2	7.5kpts	1GSa/s				●									
	UTD1102C	2	7.5kpts	500MSa/s						●							
	UTD1062C	2	7.5kpts	250MSa/s								●					
UTD1000L	UTD1050DL	2	12Kpts	250MSa/s											●		
	UTD1025DL	2	12Kpts	250MSa/s												●	
	UTD1050CL	1	12Kpts	200MSa/s											●		
	UTD1025CL	1	12Kpts	200MSa/s												●	

# MSO/UPO3000E Series

## Digital Oscilloscopes

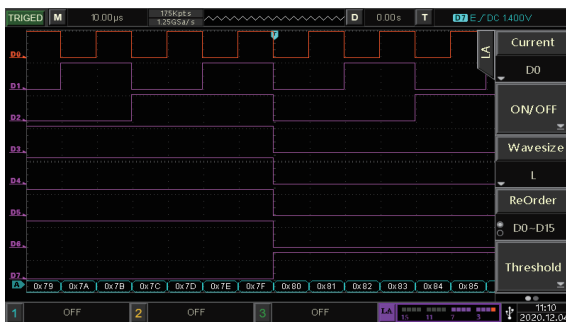


MSO3254E

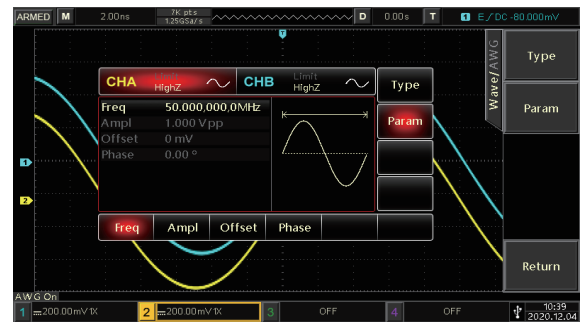
The MSO/UPO3000E Series is the new mainstream digital phosphor oscilloscope to meet the customers needs applications with its innovative technology. The series is designed for the most extensive testing and measurement applications market with its industry leading specifications, powerful trigger functions and broad analysis capabilities. The MSO 3000E series has 16 bits of mixed signal logic channels with included UT-M15 logic probe kit. With the bandwidth ranges from 150 to 500 MHz and 2 or 4 channels, this model also features with up to 2.5G Sa/s sample rate and deep memory depth as well as waveform capture rates.

- Channels: 2/4+16;
- Bandwidth: 150MHz/250MHz/350MHz/500MHz
- Sampling rate: 2.5G Sa/s; Memory depth: 70Mpts
- Waveform capture rate: 200,000wfms/s
- Built-in 50MHz dual-channel function/arbitrary waveform generator
- Independent time base of each channel

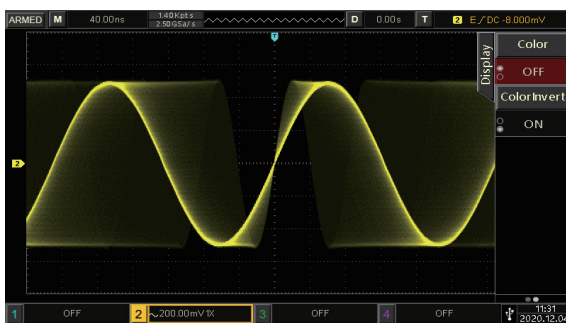
- 256-level intensity grading display
- Multiple trigger modes and bus decoding
- 8 inch TFT LCD, WVGA (800×480)
- Up to 100,000 frames waveform record
- Interfaces: USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out, Pass/Fail), VGA, LA, AWG



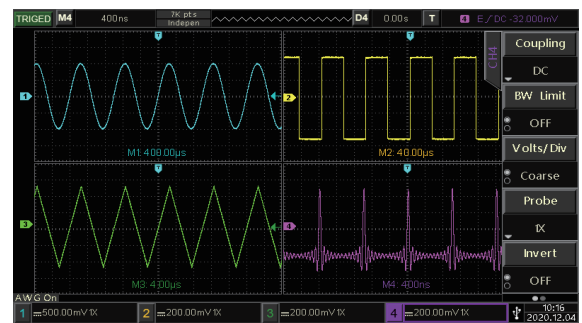
16 Digital channels LA moduel



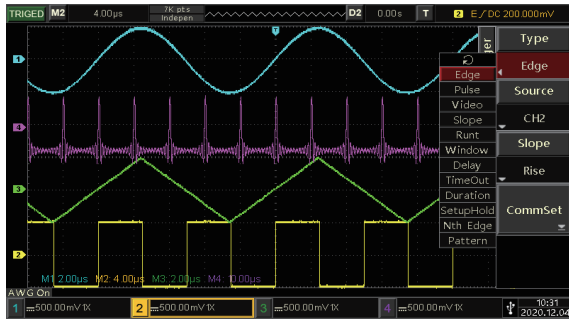
Built-in 50MHz dual-channel signal generator



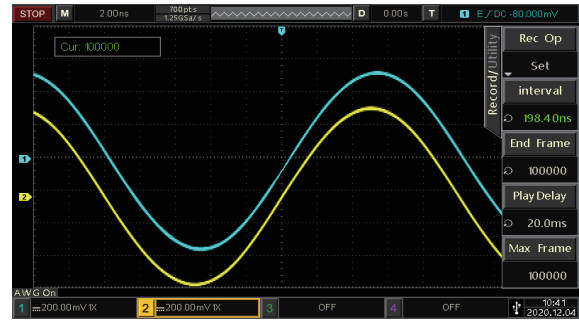
Up to 200,000wfms/s waveform capture rate, improving the ability of capturing the random and low probability events, observing the signal jitters and glitches clearly



The time base of each channel is independent and adjustable, observing simultaneously four (or two) signals with large difference in frequency



● Rich trigger functions



● Up to 100,000 frames waveform record

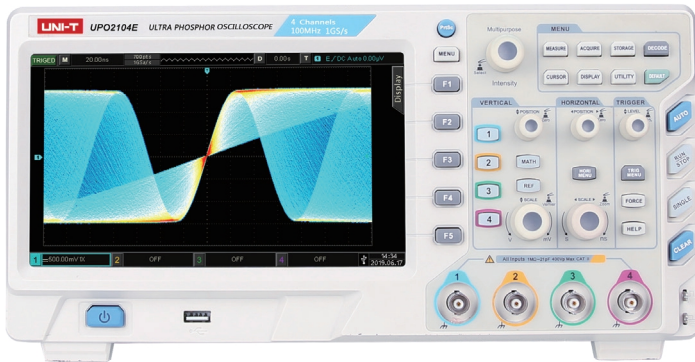
Key Specifications	MSO3152E	MSO3154E	MSO3252E	MSO3254E	MSO3352E	MSO3354E	MSO3502E	MSO3504E
	UPO3152E	UPO3154E	UPO3252E	UPO3254E	UPO3352E	UPO3354E	UPO3502E	UPO3504E
Bandwidth	150MHz		250MHz		350MHz		500MHz	
Channels	2+16digital/2	4+16digital/4	2+16digital/2	4+16digital/4	2+16digital/2	4+16digital/4	2+16digital/2	4+16digital/4
Sampling rate(analog)	2.5GSa/s(Single channel), 1.25GSa/s(Dual channels)				2.5GSa/s(Single channel), 1.25GSa/s(Dual channels)			
Sampling rate(digital)	1.25GSa/s				1.25GSa/s			
Max. memory depth	70Mpts				70Mpts			
Waveform capture rate	200,000wfms/s				200,000wfms/s			
Time base scale(s/div)	2ns/div~40s/div (Real-time sampling rate, memory depth display)				1ns/div~40s/div (Real-time sampling rate, memory depth display)			
Time base scale(digital)	2ns/div~40s/div(Step by 1-2-4 stall)				1ns/div~40s/div(Step by 1-2-4 stall)			
Input impedance	(1MΩ±1%)    (18pF±3pF)				(±1%@1MΩ, ±1.5%@50Ω)    (18 pF± 3 pF)			
Input impedance(digital)	(101kΩ±1%)    (9pF±1pF)				(101 kΩ±1%)    (9 pF ± 1 pF)			
Vertical scale(V/div)	1mV/div~20 V/div(1 MΩ)				1mV/div~10 V/div(1 MΩ); 1mV/div~1V/div(50Ω)			
DC gain accuracy	≤±3%				≤±3%			
Waveform record	100,000 frames				100,000 frames			
Trigger types	Edge, Runt, Window, N th , Delay, Overtime, Duration, Setup/Hold, Pulse Width, Slop, Video, Code; RS232/UART, I2C, SPI, USB(optional), CAN(optional),LIN(optional)							
Bus decode	RS232/UART, I2C, SPI, CAN(optional),LIN(optional),FlexRay(optional)							
Mathematical operations	A+B, A-B, A×B, A/B, FFT, editable advanced and logical operations digital filtering							
Auto measurements	Max, Min, High, Low, Ampl, Pk-Pk, Middle, Mean, CycMean, RMS, CycRMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, FRR, FRF, FFR, FFF, LRF, LRR, LFR, LFF, +Duty, -Duty, Area, CycArea, OverSht, PreSht, Phase, 34 parameters in total. Digital channel: Freq, Period, +Width, -Width, +Duty, -Duty, RiseDelay A→B, FallDelay A→B, Phase A→B, Phase B→A							
Number of measurements	Display 5 measurements at the same time							
Measurement statistics	Average, Max, Min, standard deviation, number of measurements				Average, Max, Min, standard deviation, number of measurements			
Frequency counter	7 bits				7 bits			
Standard interfaces	USB Host, USB Device, LAN, EXT Trig, AUX Out (Trig Out, Pass/Fail), AWG(Only MSO3000E),UT-M12(Optional), VGA							
Power	100V~240V AC, 50Hz/60Hz							
Display	8 inch TFT LCD, WVGA(800x480)							
Product net weight	4.2kg							
Product size(W×H×D)	370mm x 195mm x 125mm							
Standard quantity per carton	2pcs							
Standard carton size	470mm x 425mm x 300mm							
Standard carton gross weight	12.5kg							

Ordering Information	
Model MSO3000E Series	MSO3504E :500MHz, 2.5GSa/s, 70Mpts, 4+16CH MSO
	MSO3502E :500MHz, 2.5GSa/s, 70Mpts, 2+16CH MSO
	MSO3354E :350MHz, 2.5GSa/s, 70Mpts, 4+16CH MSO
	MSO3352E :350MHz, 2.5GSa/s, 70Mpts, 2+16CH MSO
	MSO3254E :250MHz, 2.5GSa/s, 70Mpts, 4+16CH MSO
	MSO3252E :250MHz, 2.5GSa/s, 70Mpts, 2+16CH MSO
	MSO3154E :150MHz, 2.5GSa/s, 70Mpts, 4+16CH MSO
	MSO3152E :150MHz, 2.5GSa/s, 70Mpts, 2+16CH MSO
Model UP03000E Series	UP03504E :500MHz, 2.5GSa/s, 70Mpts, 4CH
	UP03502E :500MHz, 2.5GSa/s, 70Mpts, 2CH
	UP03354E :350MHz, 2.5GSa/s, 70Mpts, 4CH
	UP03352E :350MHz, 2.5GSa/s, 70Mpts, 2CH
	UP03254E :250MHz, 2.5GSa/s, 70Mpts, 4CH
	UP03252E :250MHz, 2.5GSa/s, 70Mpts, 2CH
	UP03154E :150MHz, 2.5GSa/s, 70Mpts, 4CH
	UP03152E :150MHz, 2.5GSa/s, 70Mpts, 2CH
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14:USB interface cable
	UT-P08:Passive probe x 2/4 (1 x, 10 x switchable, 350MHz)(MSO/UP03352E,MSO/UP03354E)
	UT-P07:Passive probe x 2/4 (1 x, 10 x switchable, 500MHz) (MSO/UP03502E,MSO/UP03504E)
	UT-P06:Passive probe x 2/4 (1 x, 10 x switchable, 300MHz)(MSO/UP03252E,MSO/UP03254E)
	UT-P05:Passive probe x 2/4 (1 x, 10 x switchable, 200MHz)(MSO/UP03152E,MSO/UP03154E)
	UT-M15:16CH logic analyzer probe(MSO3000E series)
UT-45: BNC-BNC through leads x2	



# UPO2000E Series

## Digital Oscilloscopes



● UPO2104E

- 1GSa/s real-time sampling rate, 2/4 analog channels
- Bandwidth: 70MHz, 100MHz
- Memory depth 56Mpts (single channel)
- Up to 83,000wfms/s waveform capture rate
- 256-level intensity grading display

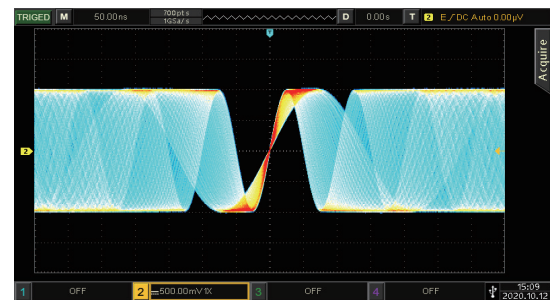
The UPO2000E Series offers unprecedented value in customer applications with its innovative technology, industry leading specifications, powerful trigger functions and broad analysis capabilities.

The Series is available in 70MHz and 100 MHz bandwidths and 2 or 4 analog channels. It adopts UNI-T UPO visualization technology, has a maximum sample rate of 1GSa/s and a standard memory depth of 56 Mpts. It comes with a minimum vertical scale input range of 1 mV/div, an innovative digital trigger system with high sensitivity and low jitter, and a waveform capture rate of 50,000 wfms/s.

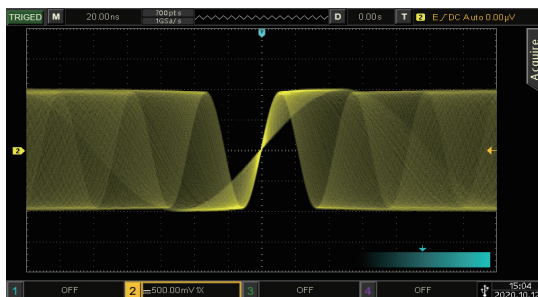
- Adjustable for each channel time base
- 65,000 frames waveform record.
- 8 inch TFT LCD, WVGA(800x480)
- Interfaces: USB Host, USB device, LAN, AUX



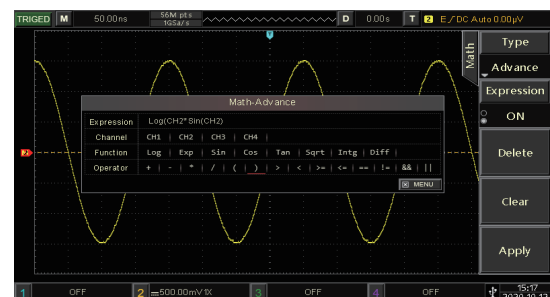
- Up to 56Mpts memory depth, capturing signals for longer time without losing the details of waveform.



- 256-level intensity grading display to timely show the probability of waveform generation



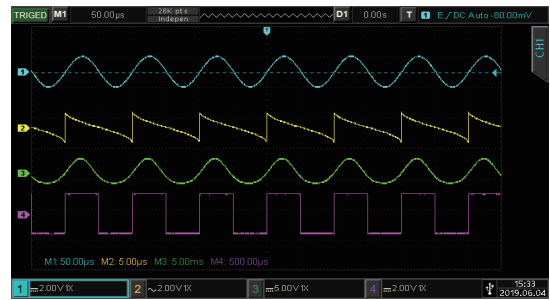
- 83,000wfms/s waveform capture rate, improving the ability of capturing the random and low probability events, observing the signal jitters and glitches clearly.



- Waveform operations, editable advanced operations



- A variety of automatic measurements and statistical functions.



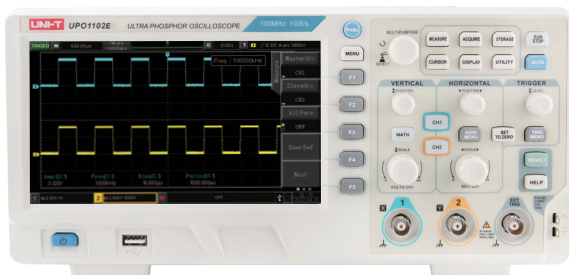
- The time base of each channel is independent and adjustable, observing simultaneously four (or two) signals with large difference in frequency

Key Specifications	UP02072E	UP02074E	UP02102E	UP02104E
Bandwidth	70 MHz		100 MHz	
Channels	2	4	2	4
Sampling rate	1GSa/s			
Max. memory depth	56Mpts(Single channel)			
Waveform capture rate	83,000wfms/s			
Time base scale	5ns/div - 50s/div			
Input impedance	(1MΩ±2%) (20 pF±3pF)			
Vertical scale	1mV/div - 20V/div(1MΩ)			
DC gain accuracy	≤±4%			
Waveform record	65,000 frames			
Trigger types	Edge, Pulse, Video, Slope, Runt, Windows, Delay, TimeOut, Duration, Setup/Hold, N th Edge, Pattern; RS232/UART, I2C, SPI			
Bus decode	RS232/UART, I2C, SPI			
Mathematical operations	A+B, A-B, A×B, A/B, FFT, Filter, Logic operation, Editable Advanced			
Auto measurements	Max, Min, High, Low, Middle, Pk-Pk, Ample, Mean, Cycle Mean, RMS, Cycle RMS, Area, Cycle Area, OverShoot, PreShoot, Period, Freq, Rise, Fall, +Width, -Width, +Duty, -Duty, RiseDelay, FallDelay, Phase, FRR, FRF, FFR, FFF, LRF, LRR, LFR, LFF			
Number of measurements	Display 5 measurements at the same time			
Measurement statistic	Average, Max, Min, Standard Deviation, Number of Measurements			
Frequency counter	Hardware 6 bits counter(Channels are selectable)			
Standard interfaces	USB-Host, USB-Device, LAN, AUX OUT			
Power	100V~240V AC, 50Hz/60Hz			
Display	8 inch TFT LCD, WVGA(800×480)			
Product color	White and grey			
Product net weight	3.5kg±0.2kg			
Product size(W×H×D)	336mm×164mm×108mm			
Standard quantity per carton	2pcs			
Standard carton size	450mm×420mm×280mm			
Standard carton cross weight	9.7kg			

Ordering Information	
Model UP02000E Series	UP02104E:100MHz, 1GSa/s, 56Mpts, 4-Channel
	UP02102E:100MHz, 1GSa/s, 56Mpts, 2-Channel
	UP02074E:70MHz, 1GSa/s, 56Mpts, 4-Channel
	UP02072E:70MHz, 1GSa/s, 56Mpts, 2-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14:USB interface cable
	UT-P04:Passive probe x2/4(1x, 10x switchable, 100MHz)

# UPO1000E Series

## Digital Oscilloscopes



● UPO1102E

The UPO1000E Series offers unprecedented value in customer applications with its innovative technology, industry leading specifications, powerful trigger functions and analysis capabilities.

The Series is available in 100 and 200 MHz bandwidths and 2 analog channels. It adopts UNI-T UPO visualization technology, has a maximum sample rate of 1GSa/s and a standard memory depth of 56 Mpts. It comes with an innovative digital trigger system with high sensitivity and low jitter, and a waveform capture rate of 150,000 wfms/s.

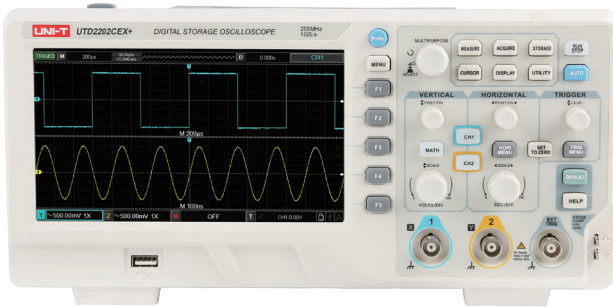
- 1GSa/s real-time sampling rate per channel, 2 analog channels
- Bandwidth: 100MHz, 200MHz
- Memory depth 56Mpts (per channel)
- Up to 150000wfms/s waveform capture rate
- 256-level intensity grading display
- Alternative trigger
- Low noise floor, minimum vertical gear 1mV / div
- A variety of trigger modes, and a variety of serial bus trigger and real-time decoding
- 100,000 frames waveform record
- 7 inch TFT LCD, WVGA (800x480)
- Interfaces: USB Host, USB device, LAN, EXT Trig、AUX

Key Specifications	UPO1102E	UPO1202E
Bandwidth	100 MHz	200 MHz
Channels	2	2
Sampling rate	1GSa/s	
Max. memory depth	56Mpts (Per channel)	
Waveform capture rate	150000wfms/s	
Time base scale(s/div)	2ns/div - 1000s/div	
Input impedance	(1MΩ±2%)   (18 pF±3pF)	
Vertical scale(V/div)	1mV/div - 20V/div(1MΩ)	
DC gain accuracy	±3%	
Waveform record	100,000 frames	
Trigger types	Edge, pulse width, slope, alternation, video, delay, timeout, duration, build / hold, under amplitude pulse, over amplitude pulse, RS232 / UART, I2C	
Bus decode	RS232/UART, I2C,SPI	
Mathematical operations	A+B, A-B, A×B, A/B, FFT, Filter, Logic operation, Mathematical function	
Auto measurements	Max, Min, High, Low, Middle, Pk-Pk, Ample, Mean, Cycle Mean, RMS, Cycle RMS, Area, Cycle Area, OverShoot, PreShoot, Period, Freq, Rise, Fall, +Width, -Width, +Duty, -Duty, RiseDelay, FallDelay, Phase, FRR, FRF, FFR, FFF, LRF, LRR, LFR, LFF 34 measurement parameters in total	
Number of measurements	Display 5 measurements at the same time	
Measurement statistic	Average, Max, Min, Standard Deviation, Number of Measurements	
Frequency counter	Hardware 7 bits counter	
Standard interfaces	USB-Host, USB-Device, LAN(Standard SCPI), EXT Trig,AUX OUT	

General Characteristics	
Power	100-240V AC, 45-440Hz
Display	7 inch TFT LCD, WVGA(800×480)
Product color	White and grey
Product net weight	2.5 Kg
Product size(W×H×D)	336mm×164mm×105mm
Standard quantity per carton	2pcs
Standard carton size	450mm×420mm×280mm

Ordering Information	
Model	UP01102E (100MHz, 1GSa/s, 56Mpts, 2-Channel)
UP01000E Series	UP01202E (200MHz, 1GSa/s, 56Mpts, 2-Channel)
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14:USB interface cable
	UT-P04:Passive probe x 2(1 x, 10 x switchable, 100MHz)
	UT-P05:Passive probe x 2(1 x, 10 x switchable, 200MHz)

# UTD2000CEX+ Series Digital Oscilloscopes

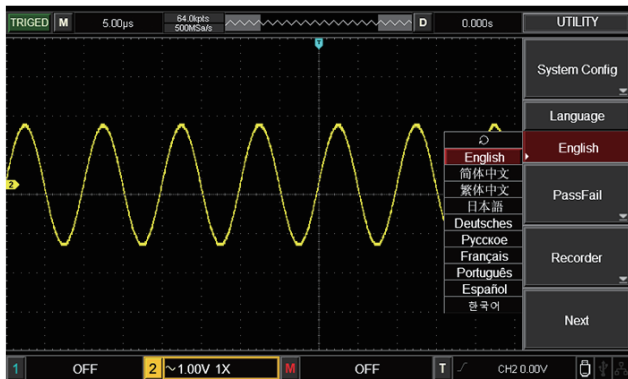


● UTD2102CEX+

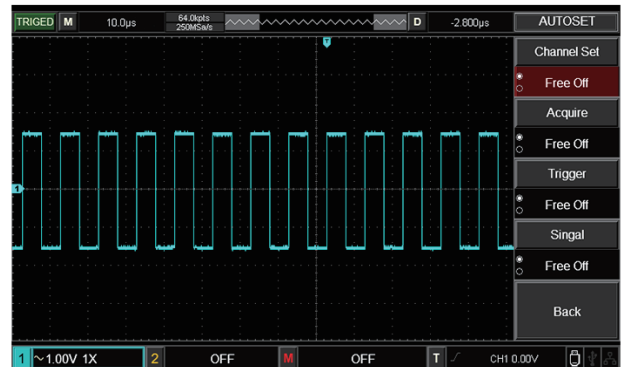
The UTD2000CEX+ Series digital storage oscilloscope is an entry-level bench solution that meets the key requirements of basic measurement. The simple and clear front panel is designed for easy operation. The UTD2000CEX+ Series has 50MHz /100MHz/200MHz bandwidth, real-time sampling rate of 1GSa/ s, dual channel and other performance output, and storage depth of 64kpts. With extensive application scenarios, this model is suitable for communication, semiconductor, computer, instrument, industrial electronics, consumer electronics, automotive electronics, on-site maintenance, R & D / education and more.

- 50/100/200MHz bandwidth
- 2 channels, low noise floor, wide vertical range: 1mV/div~20V/div
- Memory depth: 64kpts
- System software upgrade via USB drive

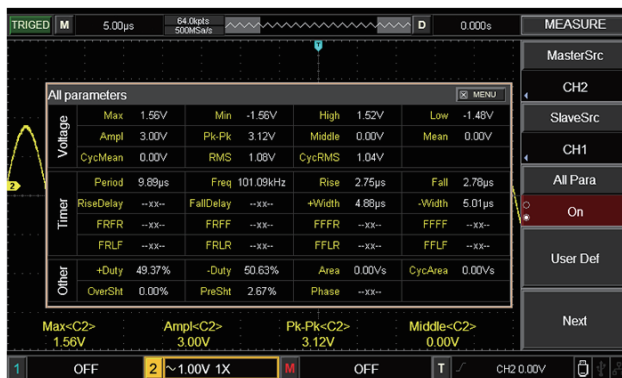
- 7 inch TFT LCD
- Supports plug-and-play USB storage device; communication with and remote control of computer through the USB device



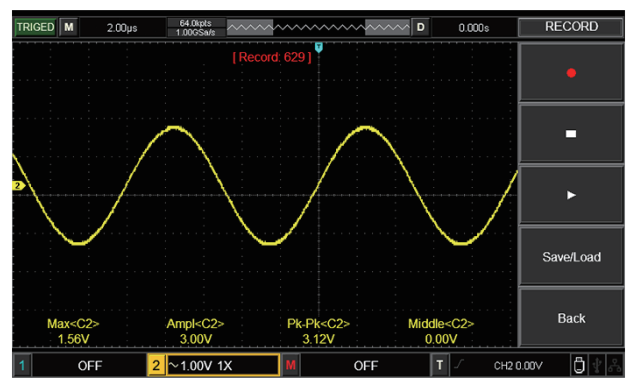
- Multilingualism to meet the needs of more users in countries



- 8div×16div Wider display range



- Automatic Measurement of Waveform Parameters



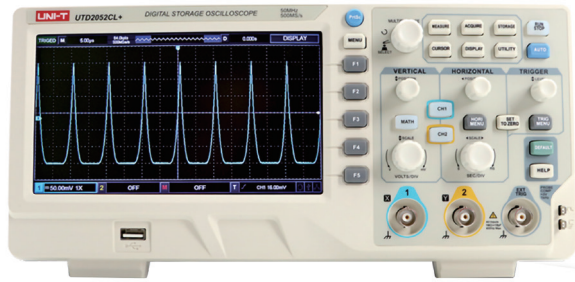
- Waveform recording functions

Key Specifications	UTD2052CEX+	UTD2102CEX+	UTD2202CEX+
Bandwidth	50MHz	100MHz	200MHz
Channels	2		
Sampling rate	1GSa/s		
Memory depth	64kpts		
Waveform capture rate	5,000wfms/s		
Rise time	<7ns	<3.5ns	<1.8ns
Vertical scale (V/div)	1mV/div~20V/div		
Vertical resolution	8bit		
Time base scale (s/div)	2ns/div~50s/div		
Deviation from scope	±8div(away from screen center)		
Input impedance	1MΩ±2% ,18±3pF		
Input coupling	DC, AC, GND		
Timing accuracy	≤±(50+2 × service life) ppm		
Time base mode	Y-T, X-Y, Roll		
Storage methods	Setup, wave, bitmap		
Trigger types	Edge, pulse, alternate, slope, video		
Mathematical operations	+, -, ×, ÷, FFT		
Auto measurements	Max, Min, High, Low, Ampl, Pk-Pk, Middle, Mean, CycMean, RMS, CycRMS, Period, Freq, Rise, Fall, RiseDelay, FallDelay, +Width, -Width, FRR, FRF, FFR, FFF, LRF, LRR, LFR, LFF, +Duty, -Duty, Area, CycArea, OverSht, PreSht, Phase, 34 parameters in total		
Displayed measurements	Display 5 measurements at the same time		
Frequency counter	6 bits		
Interface	USB Host, USB Device, Pass/Fail		
Power	100-240VAC, 45-440Hz		
Display	7 inch TFT LCD, 800×480		
Product color	White and grey		
Product net weight	2.5kg		
Product size (W×H×D)	306mm×138mm×124mm		
Standard quantity per carton	2pcs		
Standard carton size	450mm x 420mm x 280mm		
Standard carton gross weight	7.5kg		

Ordering Information	
UTD2000CEX+	UTD2202CEX+:200MHz,1GSa/s,64kpts,2-Channel
	UTD2102CEX+:100MHz,1GSa/s,64kpts,2-Channel
	UTD2052CEX+:50MHz,1GSa/s,64kpts,2-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14:USB interface cable
	UT-P03:Passive Probe x 2 (1 x , 10 x switchable,60MHz)
	UT-P04:Passive Probe x 2 (1 x , 10 x switchable,100MHz)
	UT-P05:Passive Probe x 2 (1 x , 10 x switchable,200MHz)

# UTD2000CL/CL+ Series

## Digital Oscilloscopes

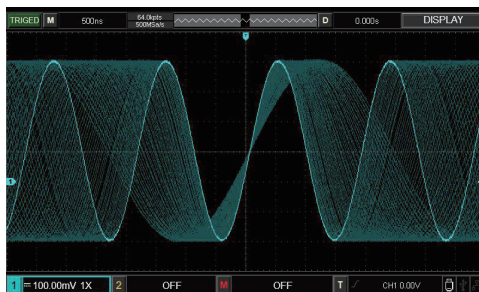


● UTD2052CL+

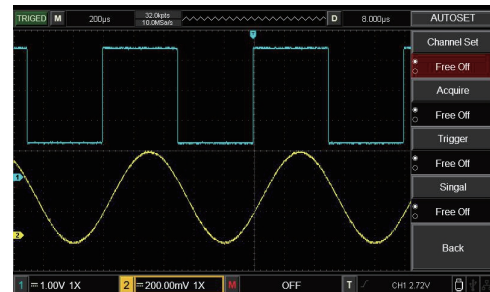
The UTD2000CL /CL+ Series is a popular entry-level digital oscilloscopes. The model is designed to meet the mainstream testing needs. Classic front panel design with clear user interface is ideal for your daily testing tasks.

- 50MHz/70MHz/100MHz/150MHz bandwidth
- 2 channels, low noise floor, wide vertical range: 1mV/div~20V/div
- Memory depth: 64kpts

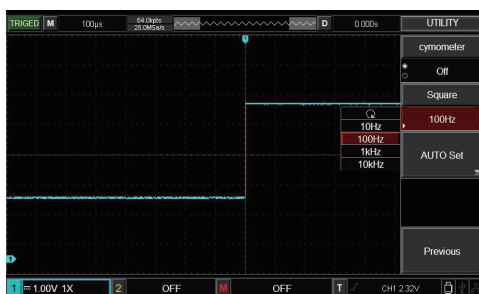
- System software upgrade via USB drive
- 7 inch TFT LCD
- Supports plug-and-play USB storage device, communication with and remote control of computer through the USB device



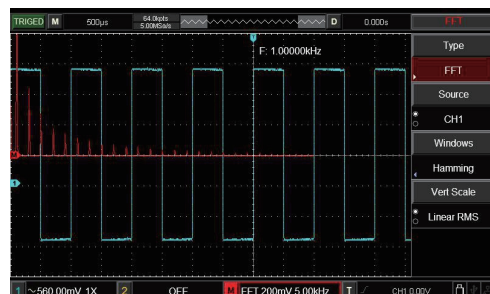
- Wider display range 8divx16div



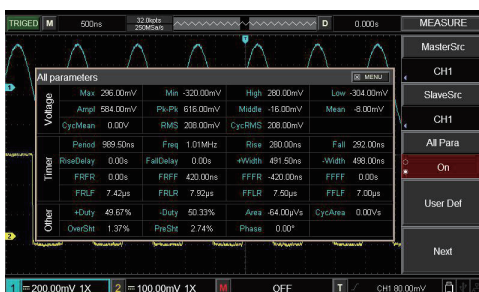
- New autoset function, easy to handle complex test scenarios



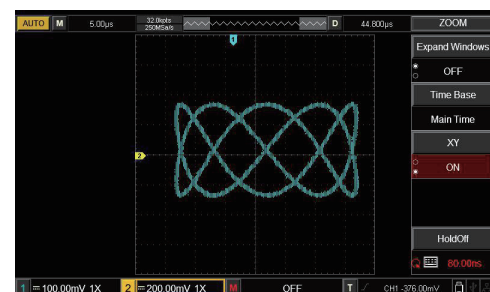
- Multiple frequency output standard square wave optional



- Abundant math functions: math operation, FFT, digital filtering



- Automatic measurement of waveform parameters



- Lissajous figure phase measurement

# DIGITAL OSCILLOSCOPES

Key Specifications	UTD2052CL+	UTD2102CL+	UTD2072CL	UTD2152CL
Channels	2		2	
Bandwidth	50MHz	100MHz	70MHz	150MHz
Sampling rate	500MSa/S			
Memory depth	64kpts			
Waveform capture rate	5,000wfms/s			
Rise time	<7ns	<3.5ns	<5ns	<2.4ns
Vertical scale(V/div)	1mV/div~20V/div			
Time base scale(s/div)	2ns/div-50s/div		2ns/div-50s/div	
Timing accuracy	±(50+2× service life)ppm			
Time base modes	Y-T, X-Y, Roll			
Storage methods	Setup, wave, bitmap			
Trigger types	Edge, pulse, alternate, slope, video			
Mathematical operations	A+B, A-B, A×B, A/B, FFT			
Auto measurements	Max, Min, High, Low, Ampl, Pk-Pk, Middle, Mean, CycMean, RMS, CycRMS, Period, Freq,Rise, Fall, RiseDelay, FallDelay, +Width, -Width, +Duty, -Duty,FRR, FRF, FFR, FFF, LRF, LRR, LFR, LFF, Area, CycArea, OverSht, PreSht, Phase, 34 parameters in total			
Number of measurements	Display 5 measurements at the same time			
frequency counter	6 bits			
Standard interfaces	USB Host,USB Device,Pass/Fail			
Power	100-240V AC, 45-440Hz			
Display	7 inch TFT LCD, 800×480			
Product color	White and grey			
Product net weight	2.5kg			
Product size (W×H×D)	336mm×164mm×108mm			
Standard quantity per carton	2pcs			
Standard carton size	450mm x 420mm x 280mm			
Standard carton cross weight	6.7kg			

## Ordering Information

UTD2000CL Series	UTD2152CL:150MHz, 500MS/s, 64kpts, 2-Channel
	UTD2072CL:70MHz, 500MS/s, 64kpts, 2-Channel
	UTD2102CL+:100MHz, 500MS/s, 64Kpts, 2-Channel
	UTD2052CL+:50MHz, 500MS/s, 64Kpts, 2-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14:USB interface cable
	UT-P05:Passive probe x 2 (1 x, 10 x switchable, 200MHz)(UTD2152CL)
	UT-P04:Passive probe x 2 (1 x, 10 x switchable, 100MHz)(UTD2072CL,UTD2102CL+)
	UT-P03:Passive probe x 2 (1 x, 10 x switchable, 60MHz)(UTD2052CL+)



# UTD1000C Series

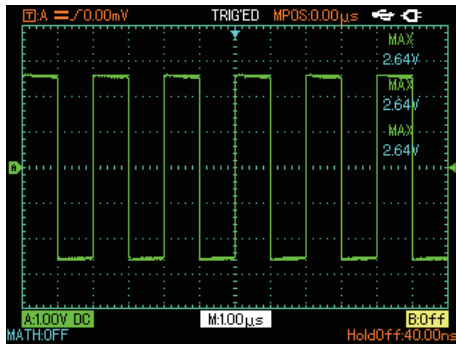
## Handheld Digital Storage Oscilloscopes



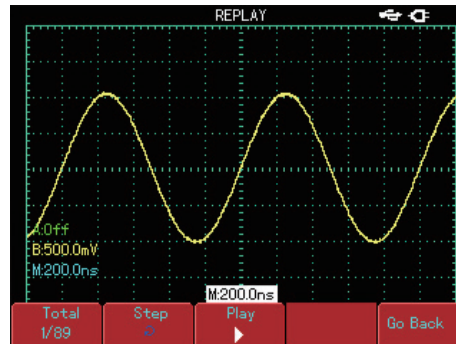
● UTD1062C

The UTD1000C Series handheld oscilloscope with user-friendly interface is designed to meet your test needs. Its powerful trigger and analytical functions also make it easy to acquire and analyses waveforms, You may either choose to use the external AC power supply or the built-in lithium battery as power source accordingly to your test needs. Classic design with clear user interface aligned with the bench models ensures a hassle-free user experience that will help to complete your daily testing tasks quick and easy.

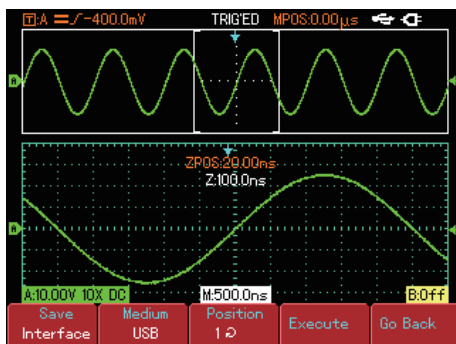
- 250MSa/s, 500MSa/s, 1GSa/s real-time sampling rate; 2 analog channels
- Bandwidth: 60MHz/100MHz/200MHz
- Multimeter function, 5999 display count
- Fine window extension; precise analysis of waveform details and overview
- Automatic measurement of 27 waveform parameters
- Unique waveform recording, storage and replay function
- Multilingual menu displays
- HD color 5.7 inch LCD panel at 320 x 240 pixel aspect ratio



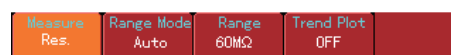
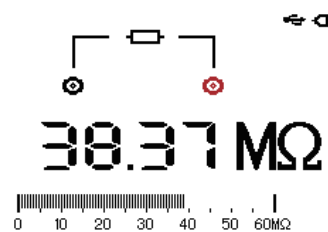
- Fast automatic measurement



- Recorded waveform replay



- Display under window zoom



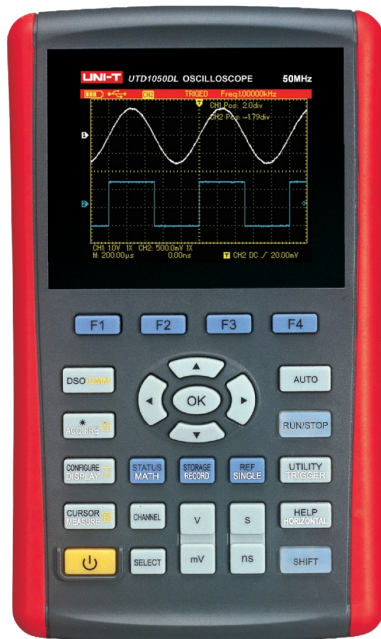
- 5999 display count multimeter function

Key Specifications	UTD1062C	UTD1102C	UTD1202C
Bandwidth	60MHz	100MHz	200MHz
Channels	2		
Sampling rate	250MSa/s	500MSa/s	1GSa/s
Rise time	≤5.8ns	≤3.5ns	≤1.8ns
Memory depth	7.5kpts		
Vertical scale (V/div)	5mV/div-50V/div		
Time base scale (s/div)	5ns/div-50s/div	5ns/div-50s/div	2ns/div-50s/div
Storage modes	Setup, waveform, bitmap		
Trigger types	Edge, pulse width, video and alternative		
Standard interfaces	USB Host		
Multimeter Specifications	Range	Accuracy	
DC voltage (V)	600mV/6V/60V/600V/1000V	±(1%+5)	
AC voltage (V)(45Hz-400Hz)	600mV/6V/60V/600V/700V	±(1.2%+5), Frequency: <200Hz	
		±(1.5%+5), Frequency: ≥200Hz	
DC current (A)	6mA/60mA/600mA	±(1.2%+5)	
	6A	±(1.5%+5)	
AC current (A)(45Hz-400Hz)	6mA/60mA/600mA	±(2%+5)	
	6A	±(2.5%+5)	
Resistance (Ω)	6kΩ/60kΩ/600kΩ	±(1.2%+5)	
	600Ω/6MΩ/60MΩ	±(1.5%+5)	
Capacitance (F)	6nF/6mF	±(5%+10)	
	60nF/600nF/6μF/60μF/600μF	±(4%+5)	
Display count	5999		
Auto range	Auto/manual (Only manual mode is available for current measurement)		
Power	Li-ion battery: 7.4V 4400mAh; DC adapter: 100-240V 50/60Hz input, 9V/4A output		
Display	5.7 inch TFT LCD, QVGA (320x240)		
Product color	Red and grey		
Product net weight	1.8kg		
Product size (W×H×D)	268mm x 168 mm x 60mm		
Standard quantity per carton	4pcs		
Standard carton size	500mm x 400mm x 320mm		
Standard carton gross weight	16.7kg		

Ordering Information	
UTD1000C Series	UTD1202C: 200MHz, 7.5Kpts, 1GSa/s, 2-Channel
	UTD1102C: 100MHz, 7.5Kpts, 500MSa/s, 2-Channel
	UTD1062C: 60MHz, 7.5Kpts, 250MSa/s, 2-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-H04: Passive Probe x 2 (1 x, 10 x switchable, 100MHz)
	UT-H05: Passive Probe x 2 (1 x, 10 x switchable, 200MHz)
	UT-M03: 1 Voltage/current converter: 4mA-600mA
	UT-M04: 1 Voltage/current converter: 4A/6A
	DC adapter: 1pc
	1 Multimeter probes Test lead

# UTD1000L Series

## Handheld Digital Storage Oscilloscopes

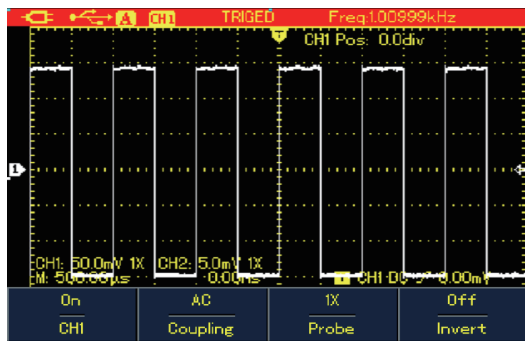


● UTD1050DL

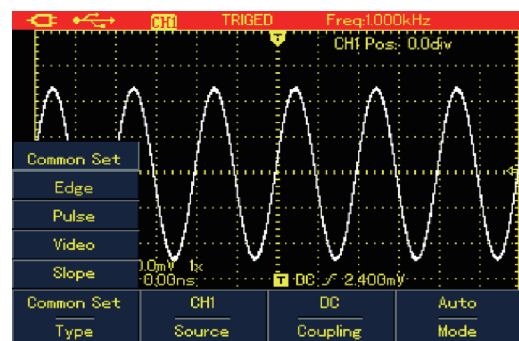
The UTD1000L Series Handheld Digital Storage Oscilloscope with 2-in-1 design serves not only as a digital scope but a multimeter as well.

The outstanding features of this model provides you extensive functions that you may need to complete various test and measurement tasks.

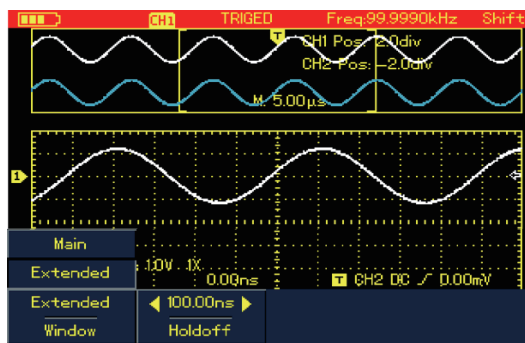
- 250MSa/s, 200MSa/s real-time sampling rate; 1/2 analog channels
- Bandwidth: 25MHz, 50MHz
- Combine oscilloscope multimeter and recorder functions in one, 3999 display count
- 8 hours of continuous battery operation for UTD1000CL and 6 hours for UTD1000DL
- 22 types of auto measurements
- Unique waveform record, storage and replay functions
- High-resolution and high-contrast color LCD
- Simple printscreen function



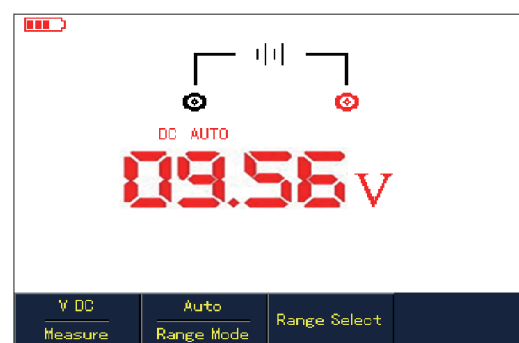
- Full autoset



- Typical and practical trigger function



- Display under window zoom



- 3999 display count multimeter function

Key Specifications	UTD1025CL	UTD1050CL	UTD1025DL	UTD1050DL
Bandwidth	25MHz	50MHz	25MHz	50MHz
Channels	1		2	
Sampling rate	200MSa/s		250MSa/s	
Rise time	≤14ns	≤7ns	≤14ns	≤7ns
Memory depth	12kpts			
Vertical scale (V/div)	5mV/div~20V/div			
Time base scale (s/div)	10ns/div~50s/div	5ns/div~50s/div	10ns/div~50s/div	5ns/div~50s/div
Storage methods	Setup, waveform, bitmap			
Trigger types	Edge, pulse width, video, slope			
Standard interface	Mini USB			
Multimeter Specifications	Range			Accuracy
DC voltage (V)	400mV/ 4V/ 40V/ 400V			±(1%+5)
AC voltage (V)	400mV/ 4V/ 40V/ 400V			±(1.2%+5)
DC current (A)	400μA/ 4000μA			±(1.2%+5)
	40mA/ 4000mA			±(1%+5)
	4A			±(1.5%+5)
AC current (A)	400μA/ 4000μA			±(2%+5)
	40mA/ 4000mA			±(1.5%+5)
	4A			±(2.5%+5)
Resistance (Ω)	400Ω/4kΩ/40kΩ/400kΩ/4MΩ			±(1.2%+5)
	40MΩ			±(1.5%+5)
Capacitance (F)	51.2nF/512nF/5.12μF/51.2μF/100μF			±(3%+5)
Display count	3999			
Power	Li-ion battery: 7.4V 3600mAh; DC adapter: 100V~240V, 50/60Hz input, 9V/4A output			
Display	3.5 inch TFT LCD, 320x240			
Product color	Red and grey			
Product net weight	0.9kg			
Product size (W×H×D)	199mm x 118 mm x 49mm			
Standard quantity per carton	2pcs			
Standard carton size	305mm x 190mm x 330mm			
Standard carton gross weight	3.3kg		4.6kg	

Ordering Information	
UTD1000DL	UTD1050DL: 50MHz, 12Kpts, 250MSa/s, 2-Channel
	UTD1025DL: 25MHz, 12Kpts, 250MSa/s, 2-Channel
UTD1000CL	UTD1050CL: 50MHz, 12Kpts, 200MSa/s, 1-Channel
	UTD1025CL: 25MHz, 12Kpts, 200MSa/s, 1-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-H03: Passive probe x 2 (1 x, 10 x switchable, 60MHz)(1000DL)
	UT-H03: Passive probe x 1 (1 x, 10 x switchable, 60MHz)(1000CL)
	UT-M10: 1 Voltage/current converter: 40mA, 400mA (1000DL)
	UT-M04: 1 Voltage/current converter: 4A/6A (1000DL)
	UT-M07: current diverter: 10A (1000CL)
	UT-D17: USB Host to Mini USB data cable
	Power adapter : 1pc
	Multimeter Test Lead: 1 pair (one red, one black)
Portable bag	

# WAVEFORM GENERATORS

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Selection Guide

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Waveform Generators

- UTG9000T Series **NEW**
- UTG4000A Series
- UTG2000A/B series
- UTG900E Series



# Selection Guide

Series	Model	Channels	Sampling rate	MAX Frequency											
				600	500	350	160	120	80	60	30	25			
UTG9000T	UTG9604T	4	2.5GSa/s	●											
	UTG9504T	4	2.5GSa/s		●										
	UTG9354T	4	2.5GSa/s			●									
UTG4000A	UTG4162A	2	500MSa/s				●								
	UTG4122A	2	500MSa/s					●							
	UTG4082A	2	500MSa/s						●						
UTG2000A/B	UTG2122B	2	1.28GSa/s					●							
	UTG2082B	2	1.28GSa/s						●						
	UTG2062B	2	1.28GSa/s							●					
	UTG2025A	2	125MSa/s											●	
UTG900E	UTG962E	2	200MSa/s								●				
	UTG932E	2	200MSa/s									●			

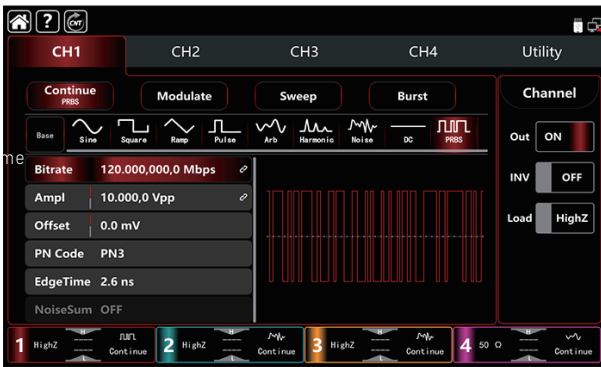
## UTG9000T Series Function/Arbitrary Waveform Generators



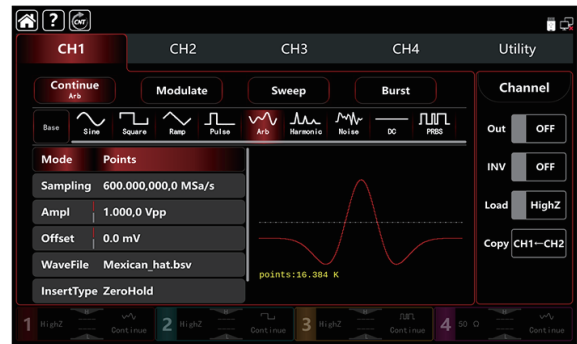
● UTG9604T

The UTG9000T Series pulse/function/arbitrary waveform generators with Direct Digital Synthesizer (DDS) technology generate accurate and stable waveform output with 600MHz bandwidth, maximum sampling rate of 2.5GSa/s and as low as 1μHz resolution. Accurate, stable, pure and low-distorted signal, simple operation, technical superiority and high-frequency square wave with rapid rising/falling edge can be also provided. These multi-functional instruments with various functions meet your requirements.

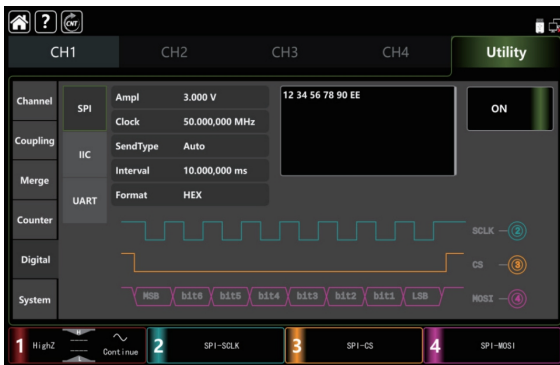
- 4 channels output
- Output: 600MHz sine wave, full-band resolution: 1μHz
- 200MHz pulse waveform with adjustable rise and fall time
- Sampling rate: 2.5GSa/s, vertical resolution: 16bits
- Arbitrary wave memory depth of 64Mpts, supports point-to-point output.
- Supports one-click SNR output.
- Frequency sweep modes: linear, logarithmic, list, stepping
- Modulation types: AM, PM, FM, DSBAM, ASK, PSK, BPSK, QPSK, FSK, 3FSK, 4FSK, QAM, OSK, PWM, SUM
- 10.1 inch capacitive touchscreen with 1280\*800 resolution
- Digital protocol output: SPI, I2C, UART
- Standard interfaces: USB Host, USB Device, LAN



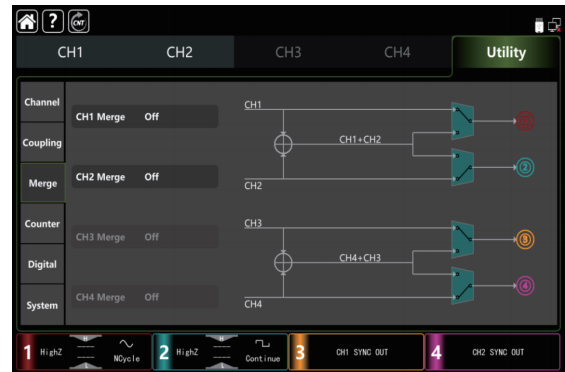
- Support for multiple signal outputs:PRBS



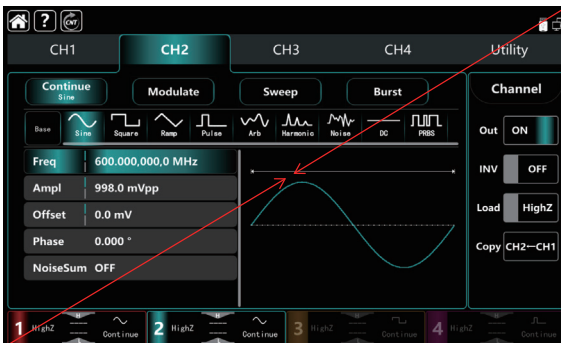
- Arbitrary wave memory depth of 64Mpts, supports point-to-point output.



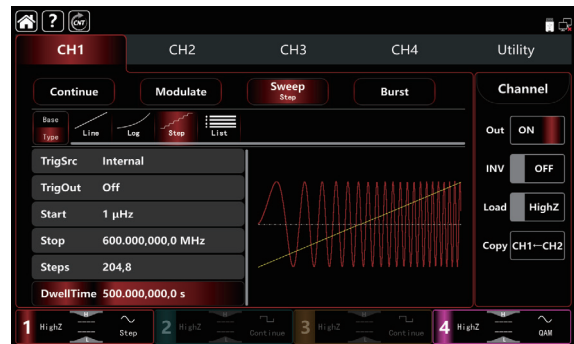
- Digital protocol output: SPI, I2C, UART



- Addition of waveforms And Channels Merge



- 10.1 inch capacitive touchscreen 4 Channel, Sampling rate: 2.5GSa/s, vertical resolution: 16bits



- Rich sweep features: Line,Log,Step,List

Key Specifications	UTG9354T	UTG9504T	UTG9604T	UTG9354T	UTG9504T	UTG9604T
Channel	CH1 & CH2(Main)			CH3 & CH4 (Slave)		
Max. frequency	350MHz	500MHz	600MHz	160MHz	200MHz	200MHz
Sampling rate	2.5GSa/s			625MSa/s		
Vertical resolution	14bits	14bits	16bits	16bits	16bits	16bits
Arbitrary wave length	8pts-64Mpts			8kpts		
Working mode	Continue, modulation, frequency sweep, burst, cymometer, digital protocol					
Continue	Sine, square, ramp, pulse, harmonic, noise, PRBS, DC, arbitrary waveform					
Modulation types	AM, PM, FM, DSBAM, ASK, PSK, BPSK, QPSK, FSK, 3FSK, 4FSK, QAM, OSK, PWM, SUM					
Frequency sweep types	Linear, logarithmic, list, stepping					
Burst types	N cycle, gating, infinite					
Digit types	SPI, I2C, UART					
Hardware cymometer	100mHz-800MHz, DC/AC coupling					
Frequency Characteristics						

# ■ WAVEFORM GENERATORS

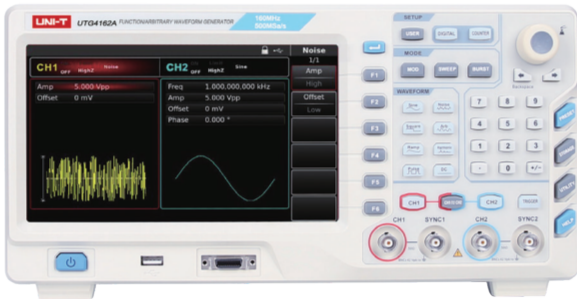
Key Specifications	UTG9354T	UTG9504T	UTG9604T	UTG9354T	UTG9504T	UTG9604T
Sine wave	1μHz-350MHz	1μHz-500MHz	1μHz-600MHz	1μHz-160MHz	1μHz-200MHz	1μHz-200MHz
Square wave	1μHz-120MHz	1μHz-160MHz	1μHz-200MHz	1μHz-50MHz	1μHz-60MHz	1μHz-60MHz
Pulse wave	1μHz-120MHz	1μHz-160MHz	1μHz-200MHz	1μHz-50MHz	1μHz-60MHz	1μHz-60MHz
Ramp wave	1μHz-20MHz	1μHz-30MHz	1μHz-30MHz	1μHz-8MHz	1μHz-10MHz	1μHz-10MHz
Noise	1μHz-350MHz	1μHz-500MHz	1μHz-600MHz	1μHz-160MHz	1μHz-200MHz	1μHz-200MHz
Arbitrary wave (DDS)	1μHz-80MHz	1μHz-100MHz	1μHz-100MHz	1μHz-50MHz	1μHz-60MHz	1μHz-60MHz
PRBS	1μbps-80Mbps	1μbps-120Mbps	1μbps-120Mbps	1μbps-40Mbps	1μbps-60Mbps	1μbps-60Mbps
Harmonic wave	1μHz-175MHz	1μHz-250MHz	1μHz-300MHz	1μHz-80MHz	1μHz-100MHz	1μHz-100MHz
Frequency resolution	1μHz					
Rise/fall time	1MHz, 1Vpp, 50Ω load					
	<2ns	<2ns	<1.5ns	<6ns	<5ns	<5ns
Output amplitude (High Z)	≤40MHz		20Vpp	≤20MHz		20Vpp
	≤120MHz		10Vpp	≤80MHz		10Vpp
	≤160MHz		5Vpp	≤120MHz		5Vpp
	≤300MHz		4Vpp	≤200MHz		3Vpp
	≤400MHz		2.5Vpp			
	≤500MHz		1.5Vpp			
Amplitude accuracy	(1kHz sine wave with 0V offset, >10mVpp)					
	±(1% of set amplitude+1mVpp)					
DC offset ranges	DC output range: peak value AC+DC -5Vpp~5Vpp(50Ω); -10Vpp~10Vpp(High Z)					
DC offset accuracy	±1% of offset set value ± 0.5% of amplitude set value ±2mV					
Interface						
Standard configuration	USB Host, USB Device, LAN					
Output resistance	50Ω					
Power	100~240V AC, 50Hz/60Hz; 100~120Vrms(±10%), 400 Hz					
Display	10.1 inch TFT capacitive touchscreen with 1280x800 resolution					
Product size(W×H×D)	370mmx115mmx185mm					
Product net weight	4.04kg					
Standard quantity per carton	1pc					
Standard carton size	500mmx305mmx315mm					
Standard carton gross weight	6.06kg					

Ordering Information	
UTG9000T Series	UTG9604T:600MHz, 2.5GSa/s, 64Mpts, 4-Channel
	UTG9504T:500MHz, 2.5GSa/s, 64Mpts, 4-Channel
	UTG9354T:350MHz, 2.5GSa/s, 64Mpts, 4-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14:USB interface cable
	BNC cables (1m):4pcs



# UTG4000A Series

## Function/Arbitrary Waveform Generators

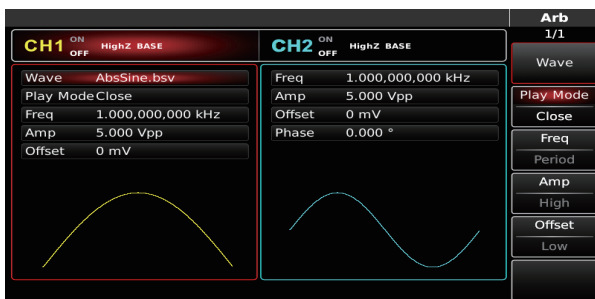


● UTG4162A

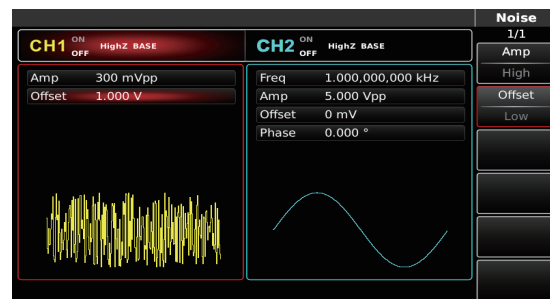
The UTG4000A Series waveform generators with multi-function design is ideal for various application scenarios. Featuring with the Function Generation, Arbitrary Waveform Generation, Pulse Generation, Harmonic Generation, Analog/Digital Modulation source, and cymometer, the UTG4000A series can handle a broad array of signal emulation applications from near DC up to 80MHz or even 160 MHz depending on model and function. The UTG4000A utilizes Direct Digital Synthesizer (DDS) technology delivers stable, precise, low distortion signals. The sleek, upright design features a high resolution 8 inch display screen, while the user-friendly interface design and panel layout improves efficiency.

- 80MHz/120MHz/160MHz sine waveform output, 1μHz full-band resolution
- 30MHz/40MHz/50MHz pulse waveform, adjustable rise/fall time
- 500MSa/s sampling rate, 16 bits vertical resolution
- Standard dual channels, supporting stand-alone or channel-coupling output mode

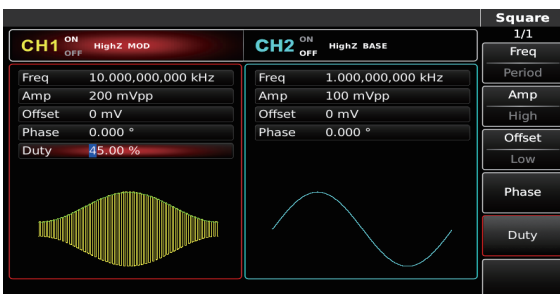
- 32Mpts arbitrary waveform depth, 7GB non-volatile arbitrary waveforms
- Versatile modulation options: AM, FM, PM, ASK, FSK, PSK, BPSK, QPSK, OSK, PWM, SUM, QAM
- Frequency cymometer range: 100mHz~800MHz
- 8 inch TFT LCD,WVGA (800×480)
- Standard Ports: USB Host, USB Device, LAN, 10MHz Input, 10MHz Output, Frequency Counter, FSK Trig, Modulation In



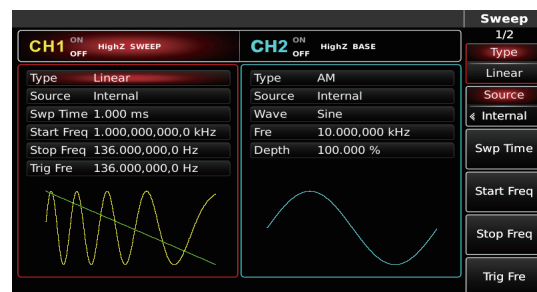
- Built-in arbitrary waveform available at any time



- Noise modes

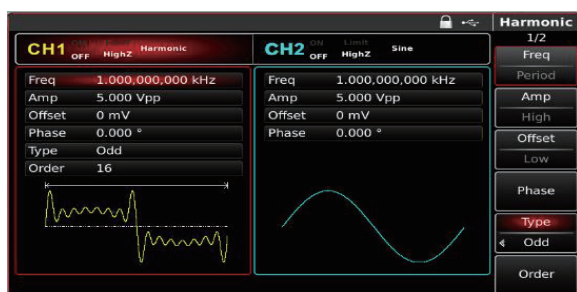


- Rich modulation functions



- Linear and logarithmic sweep waveform

# WAVEFORM GENERATORS



● Customize harmonic generation function



● Special digital interface (optional)

Key Specifications	UTG4082A	UTG4122A	UTG4162A
Max. frequency	80MHz	120MHz	160MHz
Channels	2		
Sampling rate	500MSa/s		
Waveforms	Sine,square,ramp,harmonic,pulse,noise,DC voltage,arbitrary		
Working modes	Continuous, modulation, sweep, burst		
Modulation types	AM,FM,PM,ASK,FSK,PSK,BPSK,QPSK,OSK,PWM,SUM,QAM		
Frequency Characteristics			
Sine	1μHz-80MHz	1μHz-120MHz	1μHz-160MHz
Square/Pulse	1μHz-30MHz	1μHz-40MHz	1μHz-50MHz
Ramp	1μHz-2MHz	1μHz-3MHz	1μHz-4MHz
Harmonic	1μHz-40MHz	1μHz-60MHz	1μHz-80MHz
Noise(-3dB)	80MHz	120MHz	160MHz
Resolution	1μHz		
Arbitrary Waveform			
Frequency range	1μHz-20MHz	1μHz-30MHz	1μHz-40MHz
Memory depth	8pts-32Mpts		
Vertical resolution	16bits		
Min rise/fall time(typical: 1Vpp)	<7ns	<6ns	<5ns
Power	100V~240V AC, 50Hz/60Hz		
Display	8 inch TFT LCD, WVGA (800 x 480)		
Product net weight	3.5kg		
Product size (W×H×D)	336mm x 164mm x 108mm		
Standard quantity per carton	1pc		
Standard carton size	405mm x 225mm x 265mm		
Standard carton gross weight	4.8kg		

Ordering Information	
UTG4000A Series	UTG4162A: 160MHz, 500MSa/s, 32Mpts, 2-Channel
	UTG4122A: 120MHz, 500MSa/s, 32Mpts, 2-Channel
	UTG4082A: 80MHz, 500MSa/s, 32Mpts, 2-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14: USB interface cable
	BNC cables(1M): 1 pair
Optional Accessories	UT-U02: digital cable

# UTG2000A/B Series

## Function/Arbitrary Waveform Generators

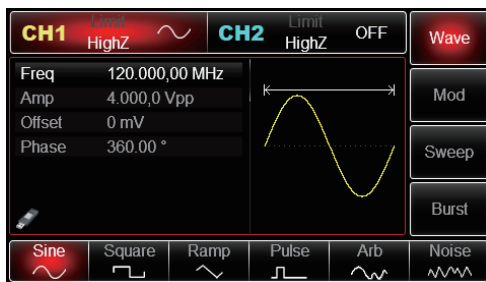


● UTG2122B

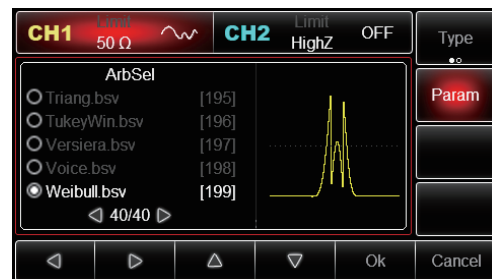
The UTG2000B Series waveform generators provide high precision, stable, pure and low distortion signals; provide high frequency square wave with quick rise and fall edges. Users can improve their working efficiency by using the multifunctional instrument with the intuitive operation interface and graphical display design.

- 60MHz/80MHz/120MHz sine waveform output, 1μHz full-band resolution
- 1.28GSa/s sampling rate, 16 bits vertical resolution
- Unique expression output function
- Standard dual channels, supporting stand-alone or channel-coupling output mode

- 16Mpts arbitrary waveform depth
- Versatile modulation options: AM, FM, PM, PWM, ASK, FSK, PSK, BPSK, QPSK, OSK, DSB-AM, SUM, QAM
- 4.3 inch TFT LCD, WVGA(800×480)
- Standard Ports: USB Host, USB Device, LAN



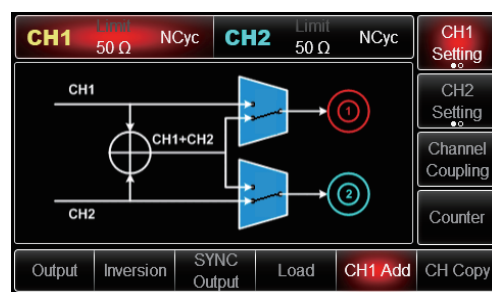
- 120MHz sine waveform output, double channels multiple waveforms selection



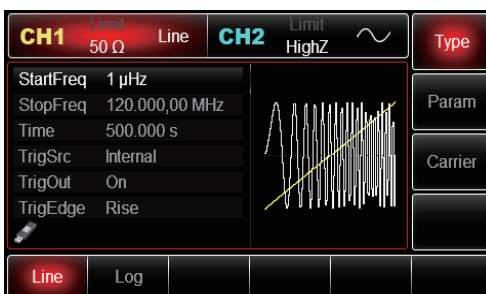
- Built-in up to 200 arbitrary waveforms



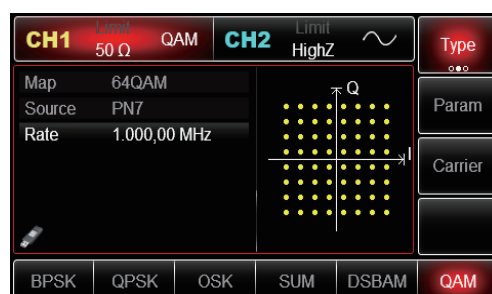
- Built-in 16 types harmonic generators



- Supporting stand-alone or channel-coupling output mode Channel merging and stacking



- Sweep function and burst mode



- Multiple analog and digital modulation functions

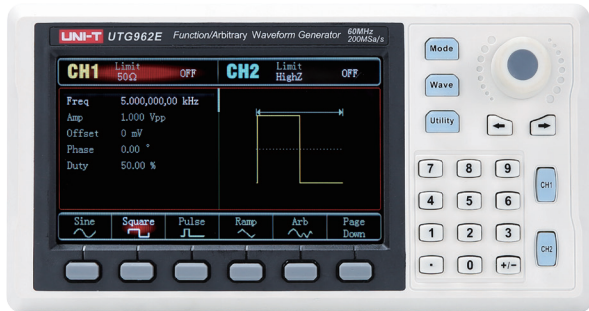
# ■ WAVEFORM GENERATORS

Key Specifications	UTG2025A	UTG2062B	UTG2082B	UTG2122B
Max. frequency	25 MHz	60MHz	80 MHz	120MHz
Channels	2			
Sampling rate	125MSa/s	1.28GSa/s(4×Interpolation)		
Waveforms	Sine, square, ramp, pulse, noise, DC, arbitrary; UTG2000B only: harmonic			
Working modes	Continuous, modulation, sweep, burst			
Modulation types	AM, FM, PM, ASK, FSK, PSK, PWM	AM, FM, PM, ASK, FSK, PSK, PWM, BPSK, QPSK, OSK, DSB-AM, SUM, QAM		
Arbitrary Waveform				
Memory depth	8pts~8kpts	8pts~16Mpts		
Vertical resolution	14bits	16bits(symbol included)		
Frequency Characteristics				
Sine	1μHz~25MHz	1μHz~60MHz	1μHz~80MHz	1μHz~120MHz
Square	1μHz~5MHz	1μHz~25MHz	1μHz~25MHz	1μHz~30MHz
Pulse	1μHz~5MHz	1μHz~20MHz	1μHz~25MHz	1μHz~30MHz
Ramp	1μHz~400kHz	1μHz~3MHz	1μHz~4MHz	1μHz~5MHz
Harmonic		1μHz~30MHz	1μHz~40MHz	1μHz~60MHz
Arbitrary	1μHz~5MHz	1μHz~15MHz	1μHz~20MHz	1μHz~25MHz
Noise	25MHz(-3dB)	60MHz(-3dB)	80MHz(-3dB)	120MHz(-3dB)
Resolution	1μHz			
Accuracy	±0.5ppm 25°C			
	First year aging rate: 1ppm			
	Temperature coefficient: ±0.5ppm/°C			
Temperature Coefficient	<2ppm/°C			
Interfaces	USB Host, USB Device, 10MHz clock source input/output, External analog modulation input			
Power	100V~240V AC, 50Hz/60Hz			
Display	4.3 inch TFT LCD, WVGA (480 x 272)			
Product net weight	3.2kg			
Product size	265mm x 110mm x 320mm			
Standard quantity per carton	2pcs			
Standard carton size	380mm x 330mm x 320mm			
Standard carton gross weight	8.5kg			

Ordering Information	
UTG2000A/B Series	UTG2122B:120MHz, 1.28GSa/s, 16Mpts, 2-Channel
	UTG2082B:80MHz, 1.28GSa/s, 16Mpts, 2-Channel
	UTG2062B:60MHz, 1.28GSa/s, 16Mpts, 2-Channel
	UTG2025A:25MHz, 125MSa/s, 8Kpts, 2-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14:USB interface cable
	BNC cables:1pc,BNC to alligator clip line(1m):1pc

# UTG900E Series

## Function/Arbitrary Waveform Generators

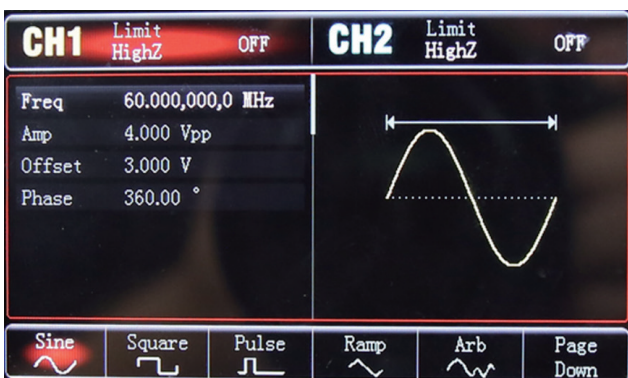


● UTG962E

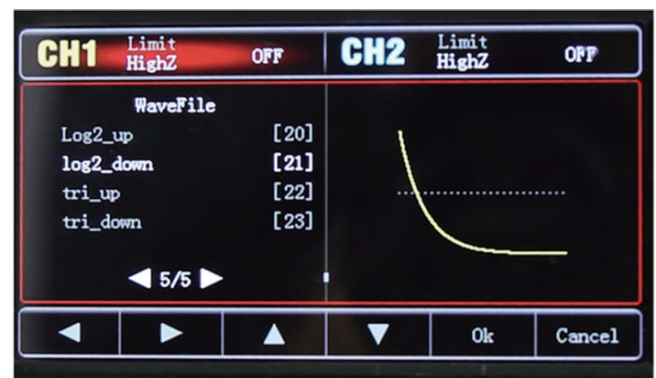
- 30MHz/60MHz sine waveform output, 1μHz full-band resolution
- 200MSa/s sampling rate, 14 bits vertical resolution, double channels
- Portable handheld mini signal generator

The UTG900E Series is an entry level handheld, high performance and multi-function arbitrary waveform generator. The compact design with 4.3 inch TFT LCD and user-friendly interface, this model meets various test scenarios and help to complete your testing tasks easier. The direct digital synthesis technology enables the accurate and stable waveform generation. This model provides up to 1μHz full-band resolution.

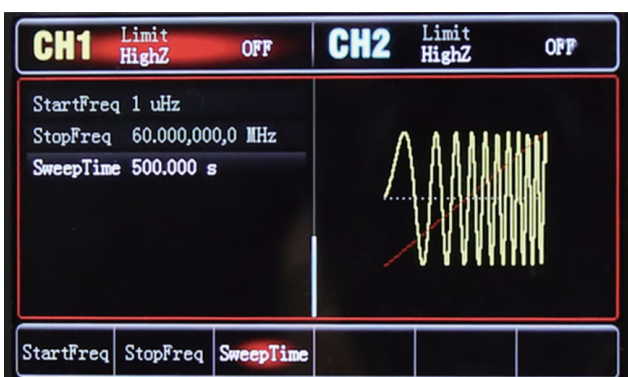
- High-accuracy, broad-band 7 bit frequency cymometer, range: 100mHz-100MHz
- Linear and logarithmic sweep functions
- 24 types of non-volatile waveform stores
- 4.3 inch high resolution color TFT display



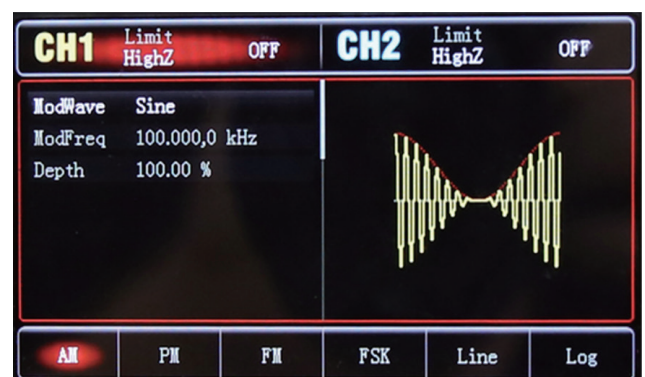
- Standard 2 Channels, multiple waveform signals  
Maximum output frequency 60MHz, dual channel, multiple waveform signals:  
sine wave, square, ramp, pulse, noise, DC, arbitrary waveform



- Built-in 24 arbitrary waveforms  
24 kinds of non-volatile digital arbitrary waveform storage



- Sweep function  
Scan type: linear and logarithmic,  
test scan from low to high, and scan output from high to low



- Modulation function  
Easy-to-use modulation types: AM, FM, PM, FSK

# ■ WAVEFORM GENERATORS

Key Specifications	UTG932E	UTG962E
Max. frequency	30MHz	60MHz
Channels	2	
Sampling rate	200MSa/s	
Vertical resolution	14 bits	
Waveforms	Sine, square, pulse, ramp, noise, DC, arbitrary	
Sweep modes	Logarithmic, linear	
Frequency Characteristics		
Sine	1μHz~30MHz	1μHz~60MHz
Square	1μHz~15MHz	1μHz~20MHz
Ramp	1μHz~400kHz	1μHz~400kHz
Pulse	1μHz~15MHz	1μHz~20MHz
Arbitrary	1μHz~10MHz	1μHz~10MHz
Resolution	1μHz	
Accuracy	Within 90 days ± 50ppm	
	Within 1 year ± 100ppm	
	18°C~28°C	
Output Characteristics		
Impedance	50Ω	
Amplitude range	1mVpp~10Vpp (50Ω); 2mVpp~20Vpp (high Z)	
DC offset range (AC+DC)	±5V (50Ω); ±10V (high Z)	
Amplitude resolution	1mV	
Power	100~240VAC, 50Hz/60Hz	
Display	4.3 inch TFT LCD(480×272)	
Product net weight	0.33kg	
Product size(W×H×D)	172mm x 90mm x 68mm	
Standard quantity per carton	4pcs	
Standard carton size	435mm x 360mm x 125mm	
Standard carton gross weight	3.8kg	

Ordering Information	
UTG900E Series	UTG962E: 60MHz, 200MSa/s, 2-Channel
	UTG932E: 30MHz, 200MSa/s, 2-Channel
Standard Accessories	Power cord conforming to the standard of the destination country
	UT-D14: USB interface cable
	BNC cables: 1pc, BNC to alligator clip line(1M): 1pc
	Power adapter

# SPECTRUM ANALYZERS

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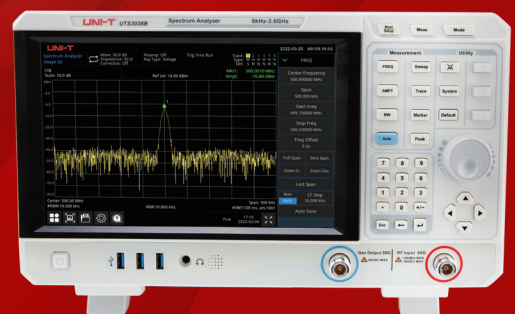
Selection Guide

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Spectrum Analyzers

— UTS3000B Series **NEW**

— UTS1000B Series **NEW**



# Selection Guide

Series	Model	Frequency Range	Frequency Resolution	RBW	Phase Noise	DANL	Tracking Source
UTS3000B	UTS3036B	9 kHz-3.6 GHz	1 Hz	1Hz-3 MHz, 1-3-10 step	<-98 dBc/Hz (Typical value) @10kHz	<-161dBm	yes
	UTS3021B	9 kHz-2.1 GHz	1 Hz	1Hz-3 MHz, 1-3-10step	<-98 dBc/Hz (Typical value) @10kHz	<-161dBm	yes
UTS1000B	UTS1032B	9 kHz-3.2 GHz	1 Hz	1Hz-1 MHz, 1-3-10 step	<-98 dBc/Hz (Typical value) @10kHz	<-161dBm	yes
	UTS1015B	9 kHz-1.5 GHz	1 Hz	1Hz-1 MHz, 1-3-10step	<-98 dBc/Hz (Typical value) @10kHz	<-161dBm	yes

## UTS3000B Series Spectrum Analyzer



● UTS3036B

- Frequency range: 9kHz~3.6GHz
- Resolution bandwidth: 1Hz~3MHz
- Tracking source: 100kHz~3.6GHz
- DANL: -161dBm
- Phase noise: <-98dBc/Hz (1GHz, typ.)
- Number of scanning points displayed: 40001
- Analysis functions: EMI analysis, advanced measurement, analog demodulation analysis, digital demodulation analysis
- Display: 10.1 inch TFT LCD (1280x800) touch screen
- Interface: HDMI,USB host,USB device,LAN, 3.5mm audio

The UTS3000B Series spectrum analyzer includes UTS3036B and UTS3021B models, with frequency bands ranging from 9kHz to 3.6GHz and 9kHz to 2.1GHz respectively. Optional tracking source. It is a spectrum analyzer with wide frequency band coverage and superior performance. The series adopts mature all digital if technology, and the resolution bandwidth can reach 1Hz to 3MHz. It provides a variety of analysis functions, and can provide 40001 scanning points to provide better help for your analysis work. This series of spectrum adopts a 10.1 inch large touch screen, which will bring you a better use experience. Compact design, multi port, support general protocol, and provide convenience for automation and remote control. The UTS3000B series is ideal for various applications from communications, semiconductors, computer, aerospace, national defense, instrumentations, industrial electronics, consumer electronics, , such as communication, semiconductor, computer, aerospace, national defense, instrumentation, industrial electronics, consumer electronics, automotive electronics, on-site maintenance, R & D / education and so on.

Key Specifications	UTS3021B	UTS3036B
Frequency range	9 kHz-2.1 GHz	9 kHz-3.6 GHz
Frequency resolution	1 Hz	
Sweep width range	0Hz, 100Hz-2.1GHz	0Hz, 100Hz-3.6GHz
Sweep accuracy	± Sweep width / (Scanning points -1)	
Cursor frequency uncertainty	± [Cursor frequency reading × reference frequency accuracy + 1% × sweep width + 10% × resolution bandwidth + cursor frequency resolution]	
Cursor type	General, difference, difference pair, relative	
Cursor function	Noise, N dB bandwidth	
RBW(-3 dB)	1 Hz-3 MHz, 1-3-10 stepping	



Key Specifications		UTS3021B	UTS3036B
Shape factor of resolution filter		<4.8:1(60dB:3dB), Gaussian like type	
Video bandwidth(-3 dB)		1 Hz~3 MHz, 1-3-10 stepping	
Bandwidth uncertainty		<5%	
Amplitude measurement range (preamplifier off)		DANL ~ +10 dBm, 100 kHz-1 MHz, DANL ~ +20 dBm, 1 MHz-2.1 GHz.	DANL ~ +10 dBm, 100 kHz-1 MHz, DANL ~ +20 dBm, 1 MHz-3.6 GHz.
Reference level		-100 dBm ~ +30 dBm, Step 1 dB	
Maximum input DC voltage		+/- 50 V DC	
Maximum continuous wave RF power		33 dBm, 3 minute, Input attenuation >20 dB	
Display logarithmic level coordinates		10 dB~100 dB	
Display linear level coordinates		0 ~Reference level	
Level coordinate unit		dBm, dBmV, dBuV, V, W	
Scanning points		40001	
Number of traces		6	
Detection mode		Positive peak, negative peak, sample, Normal, average(voltage / RMS / video), quasi peak	
Trace function		Clear write, max hold, min hold, view, close, average	
Frequency response	Preamplifier off	$\pm 0.8$ dB; $\pm 0.4$ dB, typ.	
	Preamplifier on	$\pm 0.9$ dB; $\pm 0.5$ dB, typ.	
RBW switching error		$\pm 0.2$ dB logarithmic resolution and $\pm 0.01$ linear resolution relative to RBW at 10 kHz, nominal value	
Input attenuation error		$\pm 0.5$ dB (20°C ~30°C, fc=50 MHz, Preamplifier off, Attenuation relative to 20 dB, Input attenuation 1~51 dB )	
Absolute amplitude accuracy	Preamplifier off	$\pm 0.4$ dB, Input signal level -20dBm (20°C ~30°C, fc=50 MHz, RBW=1 kHz, VBW=1 kHz, peak detector, attenuation input 20 dB)	
	Preamplifier on	$\pm 0.5$ dB, Input signal level -40dBm (20°C ~30°C, fc=50 MHz, RBW=1 kHz, VBW=1 kHz, peak detector, attenuation input 20 dB)	
Full amplitude accuracy		$\pm 0.7$ dB (20°C ~30°C, Fc>100 kHz, Input signal level -50 dBm~0 dBm, RBW=1 kHz, VBW=1 kHz, Peak detection, Input attenuation 20dB, Preamplifier off, 95% Confidence)	
Voltage input standing wave ratio		Input attenuation 10 dB 1 MHz-2.1GHz <1.5, Nominal value	Input attenuation 10 dB 1 MHz-3.6 GHz <1.5, Nominal value
Scanning time		1 ms ~ 4000 s	
Scanning mode		Sweep frequency, FFT	
Scan rule		Continuous, single	
Trigger source		Free, video, external	
External trigger settings		level (5V TTL) , Rising edge / falling edge	
Tracking source	Frequency range	100 kHz-2.1 GHz	100 kHz-3.6 GHz
	RBW	30 Hz-1 MHz, Only scan mode is supported	
	Output level range	-20 dBm~0 dBm	
	Output level resolution	1 dB	
	Flatness output	+/-3 dB	
	Maximum reverse input level	Average power: 30 dBm, DC : $\pm 50$ V DC	
Interface		Trace source output,10MHz reference input, 10MHz reference output,Ext Trigger,HDMI,USB host, USB device,LAN, 3.5mm	

General Characteristics	
Power	100~240V AC, 50Hz/60Hz
Display	10.1 inch TFT LCD(1280x800) touch
Product size(W×H×D)	368 mm×218 mm×120 mm
Product net weight	4.5kg
Standard quantity per carton	1pc

Ordering Information	
UTS3000B Series	UTS3036B:3.6GHz, 1Hz~3 MHz, -161dBm/Hz
	UTS3021B:2.1GHz, 1Hz~3 MHz, -161dBm/Hz
Standard Accessories	Power cord conforming to the standard of the destination country
Optional Accessories	UTS-C01:RF converter
	UTS-C02:RF converter
	UTS-C03:RF cable
	UTS-C04: 2.4GHz antenna 1 pair

# UTS1000B Series

## Spectrum Analyzer



● UTS1032B

- Frequency range: 9kHz~3.2GHz
- Resolution bandwidth: 1Hz~1MHz
- Tracking source: 100kHz~3.2GHz
- DANL: -161dBm
- Phase noise: <-98dBc/Hz (16Hz, typ.)
- Number of scanning points displayed: 10001
- Analysis functions: EMI analysis, advanced measurement, analog demodulation analysis, digital demodulation analysis
- Display: 10.1 inch TFT LCD (1280x800) touch screen
- Interface: HDMI, USB host, USB device, LAN, 3.5mm audio

The UTS1000B Series spectrum analyzer includes UTS1032B and UTS1015B models, with frequency bands ranging from 9kHz to 3.2GHz and 9kHz to 1.5GHz respectively. It is a spectrum analyzer with wide frequency band coverage and superior performance. and the resolution bandwidth can reach 1Hz to 1MHz. It provides a variety functions with 10001 scanning points to better help your analysis tasks. This series of spectrum adopts a 10.1 inch large touch screen, which will bring you a better use experience. Compact bench design with multi port and general protocol supports makes automation and remote control possible. UTS1000B series can be widely used in many fields, such as communication, semiconductor, computer, aerospace, national defense, instrumentation, industrial electronics, consumer electronics, automotive electronics, on-site maintenance, R & D / education and so on.

Key Specifications	UTS1015B	UTS1032B
Frequency range	9 kHz-1.5 GHz	9 kHz-3.2 GHz
Frequency resolution	1Hz	
Sweep width range	100Hz-1.5GHz	100Hz-3.2GHz
Sweep accuracy	± Sweep width / (Scanning points -1)	
Cursor frequency uncertainty	± [Cursor frequency reading × reference frequency accuracy + 1% × sweep width + 10% × resolution bandwidth + cursor frequency resolution]	
Cursor type	General, difference, fixed, relative to, cursor table	
Cursor function	Noise, N dB bandwidth, Frequency counter	
RBW (-3 dB)	1 Hz-1 MHz, 1-3-10 stepping	
Shape factor of resolution filter	<4.8:1(60dB:3dB), Gaussian like type	
Video bandwidth (-3 dB)	1 Hz ~3 MHz, 1-3-10 stepping	
Bandwidth uncertainty	< 5%	
Amplitude measurement range (preamplifier off)	DANL ~ +10 dBm, 100 kHz-1 MHz, DANL ~ +20 dBm, 1 MHz-1.5 GHz.	DANL ~ +10 dBm, 100 kHz-1 MHz, DANL ~ +20 dBm, 1 MHz-3.2GHz.
Reference level	-100 dBm ~ +30 dBm, Step 1 dB	-100 dBm ~ +30 dBm, Step 1 dB
Maximum input DC voltage	+/- 50 V DC	
Maximum continuous wave RF power	33 dBm, 3 minute, Input attenuation >20 dB	

Key Specifications		UTS1015B	UTS1032B
Display logarithmic level coordinates		1 dB~200 dB	
Display linear level coordinates		0 ~Reference level	
Level coordinate unit		dBm, dBmV, dBμV, nV, μV, mV, V, nW, μW, mW, W	
Scanning points		10001	
Number of traces		4	
Detection mode		Positive peak, negative peak, sample, Normal, average(voltage / RMS / video), quasi peak (EMI measurement option)	
Trace function		Clear write, max hold, min hold, view, close, average	
Frequency response	Preamplifier off	<0.7 dB(fc ≥ 100 kHz, attenuator is 10 dB, relative to 50 MHz, 20°C~30°C)	
	Preamplifier on	<1.0 dB(fc ≥ 100 kHz, attenuator is 10 dB, relative to 50 MHz, 20°C~30°C)	
RBW switching error		< 0.1 dB relative to RBW at 1 kHz	
Input attenuation error		<0.3 dB (20°C ~30°C, fc=50 MHz, attenuation relative to 10 dB)	
Full amplitude accuracy		±1.2 dB (20°C ~30°C, Fc>100 kHz, Input signal level -50 dBm~0 dBm, RBW=1 kHz, VBW=1 kHz, Peak detection, Input attenuation 20dB, Preamplifier off, 95% Confidence)	±0.9 dB (20°C ~30°C, Fc>100 kHz, Input signal level -50 dBm~0 dBm, RBW=1 kHz, VBW=1 kHz, Peak detection, Input attenuation 20dB, Preamplifier off, 95% Confidence)
Voltage input standing wave ratio		Input attenuation 10 dB 1 MHz~1.5 GHz <1.5, Nominal value	Input attenuation 10 dB 1 MHz~3.2 GHz <1.5, Nominal value
Scanning time		1 ms ~ 1500 s	1 ms ~ 3200 s
Scanning mode		Sweep frequency, RBW=30 kHz~1 MHz; FFT,RBW=1 Hz~10 kHz	
Scan rule		Continuous, single	
Trigger source		Free, video, external	
External trigger settings		level (5V TTL) , Rising edge / falling edge	
Tracking source	Frequency range	100 kHz~1.5GHz	100 kHz~3.2 GHz
	RBW	100 Hz~1 MHz, Only scan mode is supported	30 Hz~1 MHz, Only scan mode is supported
	Output level range	-30 dBm~0 dBm	-30 dBm~0 dBm
	Output level resolution	1 dB	
	Flatness output	+/-3 dB	
	Maximum reverse input level	Average power: 30 dBm, DC : ±50 V DC	
Interface		Trace source output,10MHz reference input, 10MHz reference output,Ext Trigger,HDMI, USB host,USB device,LAN, 3.5mm	
Power		100~240V AC, 50Hz/60Hz	
Display		10.1 inch TFT LCD(1280x800)touch	
Product size(W×H×D)		368 mm×218 mm×120 mm	
Product net weight		4.5kg	
Standard quantity per carton		1pc	

Ordering Information	
UTS1000B Series	UTS1032B:3.2GHz, 1Hz~1 MHz, -161 dBm/Hz
	UTS1015B:1.5GHz, 1Hz~1 MHz, -161 dBm/Hz
Standard Accessories	Power cord conforming to the standard of the destination country
Optional Accessories	UTS-C01:RF converter
	UTS-C02:RF converter
	UTS-C03:RF cable
	UTS-C04: 2.4GHz antenna 1 pair

# DIGITAL MULTIMETERS

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Selection Guide

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Digital Multimeters

- UT8805E 5½ Digits Benchtop Digital Multimeter
- UT8804E 4½ Digits Benchtop Digital Multimeter
- UT8803E 3½ Digits Benchtop Digital Multimeter
- UT8802E 4½ Digits Benchtop Digital Multimeter
- UT800 Series



# Selection Guide

Series	Model	Display Accuracy	DCV Annual Accuracy	Fastest Test Rate
UT8800E	UT8805E	5½	0.015%	5k rdgs/s
	UT8804E	4%	0.025%	3 rdgs/s
	UT8803E	3%	0.3%	3 rdgs/s
	UT8802E	4½	0.1%	3 rdgs/s
UT800	UT805A	5½	±(0.015%+3digital)	100 rdgs/s
	UT804	4¾	±(0.025%+5digital)	2~3 rdgs/s
	UT803	3%	±(0.3%+2digital)	2~3 rdgs/s
	UT802	4½	±(0.1%+3digital)	2~3 rdgs/s
	UT801	3½	±(0.5%+2digital)	2~3 rdgs/s

# UT8805E

## 5½ Digits Benchtop Digital Multimeter

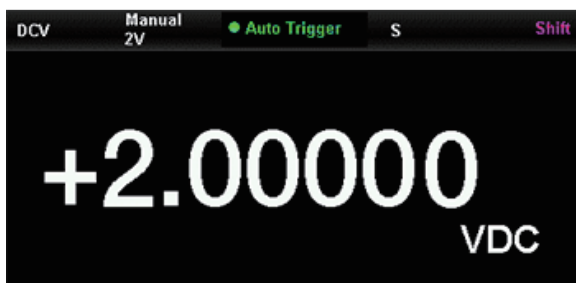


● UT8805E

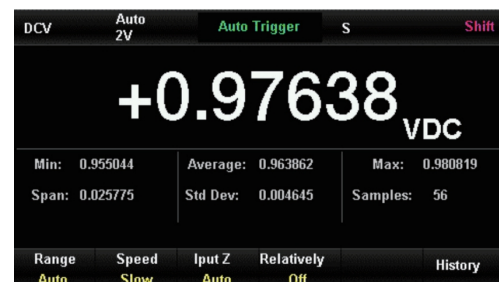
The UT8805E is an auto-ranging, true RMS desktop digital multimeter with 199999 counts, up to 5K rdgs/s, 300kHz frequency response, and a 4.3 inch TFT LCD. Pass/Fail, maximum value/minimum value/average value/relative value measurement, etc., 10K reading history data record, 1GB Nand Flash total capacity. It is a superior electrical measuring instrument. It is suitable for measurement in electronics, communications, manufacturing, petroleum, national defense, electric power, chemical and other industries. It is an indispensable experimental tool for various colleges and universities.

- 200000 counts resolution
- Measuring speed: 2.5/10/5k reading per second
- AC true RMS measurement.
- 2-line and 4-line resistance measurement
- Continuity and diode test
- Temperature measurement with built-in thermocouple cold junction compensation
- PC control software of upper computer

- Various mathematic operations: maximum, minimum, average value, standard deviation, pass/fail, dBm, dB, relative measurement, histogram, trend chart, bar chart
- USB drive store data and configuration
- Supports interface of USB, RS-232C and LAN, USB-TMC, IEEE 488.2 standard, VXI11 and SCPI language
- History data record and storage
- 1GB NAND FLASH storage, mass storage system and test data



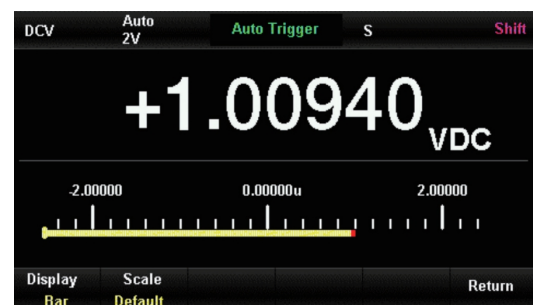
- 199999 count, 4.3 inch TFT LCD display



- Various mathematic operations: maximum, minimum, average value, standard deviation, pass/fail, dBm, dB, relative measurement, histogram, trend chart, bar chart



- Support the display of main and auxiliary parameters on the same screen. AC true RMS



- 3 kinds of display formats are supported by UT8805E. User can check the measured data by number, bar chart, trend chart, and histogram.

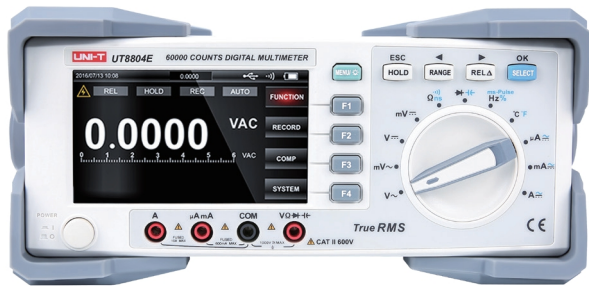
Key Specifications	UT8805E	
	Range	Accuracy (90 days)
DC voltage (V)	20mV/2V/20V/200V/1000V	±(0.008%+0.003%)
AC voltage (V)	200mV/2V/20V/200V/750V	±(0.19%+0.05%)
DC current (A)	200µA/2mA/20mA/200mA/2A/10A	±(0.050%+0.005%)
AC current (A)	2mA/20mA/200mA/2A/10A	±(0.30%+0.1%)
Resistance (Ω)	200Ω/2kΩ/20kΩ/200kΩ/2MΩ/10MΩ/100MΩ	±(0.012%+0.003%)
Capacitance (F)	2nF/20nF/200nF/2µF/20µF/200µF/2mF	±(1%+0.5%)
Frequency (Hz)	20Hz-1MHz	±(0.01%+0.003%)
Temperature (°C)	-270°C-1760°C (thermocouple and thermal resistance sensor supported)	±0.5°C
Display count	199999	
DCV Accuracy	0.015%	
Sampling rate	5k rdgs/s	
Auto range	√	
True RMS	√	
Data storage	10k data record; 1GB Nand Flash total storage	
Frequency response (Hz)	100kHz	
Diode/triode test	√	
Continuity buzzer	√	
Data hold	√	
Mathematical operations	Pass/Fail, relative value, minimum/maximum/average, standard deviation, dBm, dB, Hold, histogram, trend chart and bar chart	
Mathematical operations	≥10GB or 10MΩ	
Standard interface	USB Host, USB Device, LAN, RS-232	
Power	AC 100V-120V, 45Hz-440Hz; AC 200V-240V, 45Hz-66Hz	
Display	4.3 inch TFT LCD	
Product net weight	4.4kg	
Product size (W×H×D)	239mm×100mm×344mm	
Standard quantity per carton	2pcs	
Standard carton size	380mm x 330mm x 320mm	
Standard carton gross weight	10.5kg	

Ordering Information	
UT8000E Series	UT8805E: Benchtop Digital Multimeter (199999, Auto)
Standard Accessories	International standard power cord
	USB interface cable
	Test leads
	RS-232C interface cable
	Simple test lead with alligator



# UT8804E

## 4½ Digits Benchtop Digital Multimeter



● UT8804E

- Reading resolution: 4%, maximum reading 59999
- Measuring rate: 2 reading/s
- DC voltage range: 60mV~1000V
- DC current range: 600μA~10A
- AC voltage range: 60mV~1000V (True-RMS)
- AC current range: 600μA~10A (True-RMS)
- Resistance range: 600Ω~60MΩ
- Capacitance range: 6nF~60mF
- Conductivity range: 60ns



- UT8804E digital multimeter can display 4½ digits (59999), It can provide you high-precision and accurate result display. Its simulation bar makes the display of measurement results more intuitive. 4.3 inch full-color display, giving you a better visual experience.



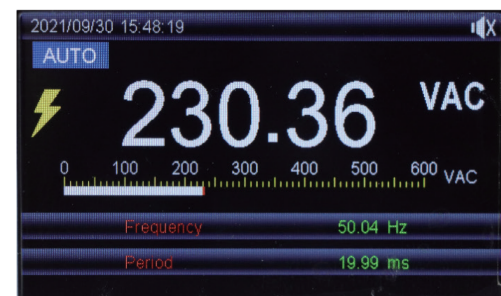
- UT8804E digital multimeter has recording function. Historical data records can be presented in statistics and trend charts.

The UT8804E is an automatic range of 59999 counts, a true RMS desktop digital multimeter, 100kHz frequency response, and a 4.3 inch TFT LCD. VFC low-pass filtering function, reduce the interference of high-frequency signals on the measurement results, NCV non-contact voltage sensing, maximum/minimum/average/relative value measurement, 20000 sets of output storage, making it a more superior electrician gauge

- Frequency measurement range: 60Hz~60MHz
- Duty cycle measurement range: 10%~90%
- Mathematical operation: maximum, minimum, average, peak, comparative measurement, trend chart
- Interface: USB device, It can be connected to the upper computer control software
- Frequency response: 100KHz
- Data record: 20000 groups
- LPF low pass filter function



- Function. For the index range required by batch device test, UT8804E will help you automatically identify unqualified devices and give an alarm.



- Additional secondary parameters can be added to make the measurement more specific, while displaying the main parameters.

Key Specifications	UT8804E	
	Range	Accuracy (90 days)
DC voltage (V)	1000V	±(0.025%+5)
AC voltage (V)	1000V(45Hz~100kHz)	±(0.3%+30)
DC current (A)	10A	±(0.08%+10)
AC current (A)	10A(45Hz~10kHz)	±(0.6%+20)
Capacitance (F)	60mF	±(0.05%+2)
Conductance (nS)	60nS	±(2%+10)
Frequency (Hz)	60MHz	±(0.01%+5)
Duty cycle (%)	10%~90% (10Hz~2kHz)	±(1.2%+30)
Temperature (°C/°F)	-40°C~1000°C	±(1%+30)
	-40°F~1832°F	±(1.5%+50)
Display count	59999	
DCV Accuracy	0.3%	
Sampling speed	2~3rdgs/s	
Range	Auto, manual	
True RMS	√	
Date display	√	
Frequency response (Hz)	100kHz	
Diode/transistor test	√	
Data storage	20000	
On-off beep	√	
Data hold	√	
Standard interface	USB Device	
Power	100V/120V/220V/240V ±10%, 47Hz~63Hz	
Display	4.3 inch TFT LCD	
Product net weight	3.7kg	
Product size (W×H×D)	239mm x 109mm x 344mm	
Standard quantity per carton	2pcs	
Standard carton size	380mm x 330mm x 320mm	
Standard carton gross weight	9.5kg	

Ordering Information	
UT8000E Series	UT8804E: Digital Multimeter (59999, Auto)
Standard Accessories	International standard power cord
	USB interface cable
	Test leads
	Simple test lead with alligator
	K-type temperature probe

# UT8803E

## 3½ Digits Benchtop Digital Multimeter



● UT8803E



The UT8803E is a 6000 counts 3 % digital, automatic range, portable desktop, AC powered digital multimeter. Large screen large character display with backlight, more clear and easy to read. With full function test, full range overload protection and unique appearance design, it has become an electrical test instrument with better performance. This instrument can be used to measure : AC / DC voltage, AC / DC current, resistance, frequency, capacitance, inductance, triode HFE, diode (LED), thyristor (SCR) and circuit on-off. Meet the measurement needs of users with multi-function, high precision and automation.

- Reading resolution: 3%, maximum reading 5999
- Measuring rate: 2~3 reading/s
- DC voltage range: 600mV~1000V
- DC current range: 600μA~10A
- AC voltage range: 600mV~750V (True-RMS)
- AC current range: 600μA~10A (True-RMS)
- Resistance range: 600Ω~60MΩ
- Capacitance range: 6nF~60mF
- Inductance range: 600μH~100H
- Frequency measurement range: 600Hz~20MHz
- Duty cycle measurement range: 5%~95%
- Mathematical operation: maximum, minimum, relative value, analog bar
- Interface: USB device, It can be connected to the upper computer control software
- Frequency response: 100KHz
- It can measure triode and thyristor



● Reading resolution 3%, maximum reading 5999



● D / Q parameters of capacitance and inductance can be measured



● Multiple measurement items optional



● Extreme value operation and reference value operation function, with analog bar

Key Specifications	UT8803E	
	Range	Accuracy
DC voltage(V)	1000V	±(0.3%+2)
AC voltage(V)	750V	±(0.6%+5)
DC current(A)	10A	±(0.8%+3)
AC current(A)	10A	±(1%+5)
Capacitance(F)	6mF	±(1.5%+5)
Resistance(Ω)	60MΩ	±(0.8%+5)
Inductance(H)	100H	±(2%+5)
Temperature(°C/°F)	-40°C~1000°C	±(1%+5)
Frequency(Hz)	600Hz~20MHz	±(0.1%+10)
Duty cycle(%)	5%~95%	Only for reference
Display count	5999	
DCV Accuracy	0.3%	
Sampling speed	2~3 rdgs/s	
Frequency response(Hz)	100kHz	
Range	Manual,Auto	
Input impedance for DCV	10MΩ	
True RMS	√	
Diode/triode	√	
SCR test	√	
Continuity buzzer/data hold	√	
LCD backlight	√	
Interface	USB Device	
Power	100V/120V/220V/240V ±10%, 47Hz~63Hz	
Display	EBTN LCD	
Product net weight	3.09kg	
Product size(W×H×D)	265mm x 110mm x 320mm	
Standard quantity per carton	2pcs	
Standard carton measurement	380mm x 330mm x 320mm	
Standard carton gross weight	9kg	

Ordering Information	
UT8000E Series	UT8803E: Digital Multimeter(Display:5999,0.3%,Range:Manual)
Standard Accessories	International standard power cord
	USB interface cable
	Test leads
	simple test lead with alligator
	temperature probe

# UT8802E

## 4½ Digits Benchtop Digital Multimeter



● UT8802E



The UT8802E is a manual range, benchtop digital multimeter that features 19999 display counts, large Screen with back light, full scale over load protection and a unique design. This instrument can be used to Measure AC and DC voltage, AC and DC current, resistance, frequency, capacitance, transistor, hFE, diode (LED), SCR, continuity, etc.

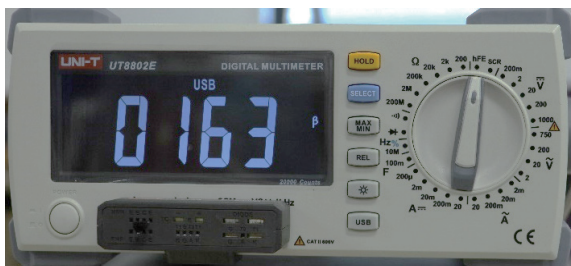
- Reading resolution: 4½, maximum reading 19999
- Measuring rate: 3 reading/s
- DC voltage range: 200mV~1000V
- DC current range: 200μA~20A
- AC voltage range: 2V~750V
- AC current range: 2mA~20A
- Resistance range: 200Ω~200MΩ
- Capacitance range: 20nF~100mF
- Frequency measurement range: 200Hz~10MHz
- Duty cycle measurement range: 5%~99%
- Mathematical operation: maximum, minimum, relative value
- Interface: USB device, It can be connected to the upper computer control software
- Frequency response: 1KHz
- It can measure diode、 triode and thyristor



- Can display 4½ bit (19999), which can provide you with high-precision and accurate result display



- With diode measurement function



- With the help of UT-S03A, the measurement of triode and thyristor can be realized



- Functions of extreme value operation and reference value operation

Key Specifications	UT8802E	
	Range	Accuracy
DC voltage (V)	200mV/2V/20V/200V/1000V	±(0.1%+3)
AC voltage (V)	2V/20V/200V/750V	±(0.5%+20)
DC current (A)	200μA/2mA/20mA/200mA/20A	±(0.5%+20)
AC current (A)	2mA/20mA/200mA/20A	±(0.8%+40)
Capacitance (F)	20nF/200nF/2μF/20μF/200μF/2mF/20mF/100mF	±(1.5%+10)
Resistance (Ω)	200Ω/2kΩ/20kΩ/200kΩ/200kΩ/2MΩ/200MΩ	±(0.5%+10)
Frequency (Hz)	200Hz-10MHz	±(1%+5)
Duty cycle (%)	5%-99%	±(1.5%+2)
Display count	19999	
DCV Accuracy	0.001	
Sampling speed	2-3 rdgs/s	
Frequency response (Hz)	1kHz	
Range	Manual	
Input impedance for DCV	10MΩ	
Diode/triode	√	
SCR test	√	
Continuity buzzer/data hold	√	
LCD backlight	√	
Interface	USB Device	
Power	100V/120V/220V/240V ±10%, 47Hz-63Hz	
Display	EBTN LCD	
Product net weight	3.09kg	
Product size (W×H×D)	265mm x 110mm x 320mm	
Standard quantity per carton	2pcs	
Standard carton measurement	380mm x 330mm x 320mm	
Standard carton gross weight	9kg	

Ordering Information	
UT8000E Series	UT8802E: Digital Multimeter(Display:19999,0.1%,Range:Manual)
Standard Accessories	International standard power cord
	USB interface cable
	Test leads
	simple test lead with alligator

# UT800 Series

## Digital Benchtop Multimeters



● UT804



● UT805A

The UT800 Series true RMS value digital multimeter can be selected from 3 1/2 digits to 5 1/2. Lightweight and economical, with manual and automatic range, AC and DC power supply, high reliability, high precision and multiple test functions. It has a large screen with backlight, super large character display, full function, All-round overload protection and unique appearance design, and equipped with a tool box, make it a more superior electronic and electrical testing instrument. It is suitable for measurement in electronics, communications, manufacturing, petroleum, electric power, chemical and other industries. It is an indispensable experimental tool for college experiments.

- 200000-count auto range/TRMS
- 256 x 64 pixels dot-matrix LCD
- High accuracy up to  $\pm(0.015\%+3)$  for DC voltage
- Analog bar display (UT804)
- Data storage and readback function
- Overload protection
- Provide DC and AC two power supply methods
- RS-232 and USB interfaces

Key Specifications	UT801	UT802	UT803	UT804	UT805A
Display count	1999	19999	5999	39999	199999
DCV Accuracy	$\pm(0.5\%+2)$	$\pm(0.1\%+3)$	$\pm(0.3\%+2)$	$\pm(0.025\%+5)$	$\pm(0.015\%+3)$
Sampling speed	2~3 rdgs/s	2~3 rdgs/s	2~3 rdgs/s	2~3rdgs/s	2rdgs/s,Max100rdgs/s
DC voltage(V)	200mV/2V/ 20V/200V/1000V	200mV/2V/ 20V/200V/1000V	1000V	1000V	1000V
AC voltage(V)	2V/20V/200V/750V	2V/20V/200V/750V	1000V	1000V	750V
DC current(A)	200 $\mu$ A/2mA/ 20mA/200mA/10A	200 $\mu$ A/2mA/ 20mA/200mA/10A	10A	10A	10A
AC current(A)	2mA/20mA/ 200mA/10A	2mA/20mA/ 200mA/10A	10A	10A	10A
Capacitance(F)	20nF/2 $\mu$ F/200 $\mu$ F	20nF/2 $\mu$ F/200 $\mu$ F	6mF	2mF	6mF
Resistance( $\Omega$ )	200 $\Omega$ /2k $\Omega$ /20k $\Omega$ / 200k $\Omega$ /2M $\Omega$ /20M $\Omega$	200 $\Omega$ /2k $\Omega$ /20k $\Omega$ / 200k $\Omega$ /2M $\Omega$ /200M $\Omega$	60M $\Omega$	40M $\Omega$	20M $\Omega$
Temperature( $^{\circ}$ C/ $^{\circ}$ F)	-40 $^{\circ}$ C-1000 $^{\circ}$ C	-40 $^{\circ}$ C-1000 $^{\circ}$ C	-40 $^{\circ}$ C-1000 $^{\circ}$ C	-270 $^{\circ}$ C-1760 $^{\circ}$ C	-
Frequency(Hz)	2kHz/200kHz	2kHz/200kHz	60Hz-60MHz	40Hz-400MHz	1Hz-60MHz
Frequency response(Hz)	400Hz	400Hz	100kHz	100kHz	100kHz
Range	Manual	Manual	Auto	Auto	Auto

Key Specifications	UT801	UT802	UT803	UT804	UT805A
Diode/Continuity	√	√	√	√	√
SCR/Transistor hFE	√	√	√	–	–
Hold	√	√	√	√	√
LCD backlight	√	√	√	Double LCD backlight	√
Auto power off	–	–	√	√	–
Low battery indication	√	√	√	√	–
True RMS	–	–	√	√	√
AC+DC measurement	–	–	√	√	√
Data storage	–	–	–	9999	–
Analog bar graph	–	–	–	√	√
Input protection	√	√	√	√	√
Interface	–	–	USB,RS-232	USB,RS-232	USB,RS232
Power	AC 220V/50Hz or 1.5V batteries(R14)x6;3Hz				
Display	EBTN LCD 128mm x 28mm				
Product net weight	1.65kg		2.4kg	2.2kg	3.2kg
Product size	300mm x 245mm x 105mm		310mm x 240mm x 105mm		300mm x 245mm x 105mm
Standard quantity per carton	4pcs				
Standard carton measurement	680mm x 365mm x 320mm				
Standard carton gross weight	8.6kg	8.3kg	11.2kg	14.5kg	18kg

Ordering Information	
UT800 Series	UT805A: Benchtop Digital Multimeter(Display:200000,0.015%,Range:Auto)
	UT804: Benchtop Digital Multimeter(Display:40000,0.025%,Range:Auto)
	UT803: Benchtop Digital Multimeter(Display:6000,0.3%,Range:Auto)
	UT802: Benchtop Digital Multimeter(Display:20000,0.1%,Range:Manual)
	UT801: Benchtop Digital Multimeter(Display:2000,0.5%,Range:Manual)
Standard Accessories	International standard power cord
	USB interface cable(803/804/805A)
	RS232interface cable(803/804/805A)
	Test leads
	simple test lead with alligator
	temperature probe(UT801/2/3/4)



# DC POWER SUPPLIES

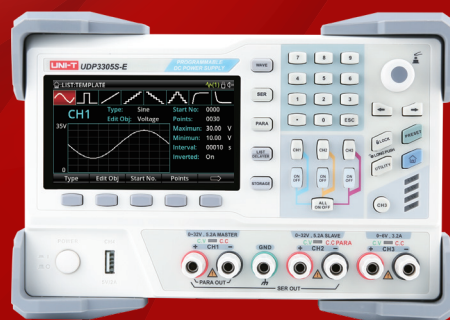
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Selection Guide

47—57

DC Power Supplies

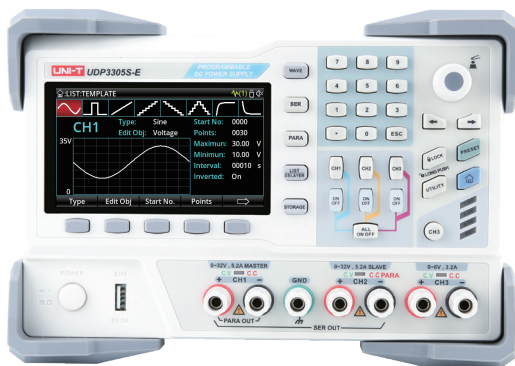
- UDP3000/S Series **NEW**
- UDP1000 Series
- UDP6700 Series **NEW**
- UTP3300TFL-II Series
- UTP3000 Series
- UTP1000 Series



# Selection Guide

Name	Series	Model	Channels	Output voltage	Output current	Max Power	Resolution
Programmable Linear DC Power Supply	UDP3000/S	UDP3305S	4	0~30V(CH1,CH2) 0~6V(CH3)5V(CH4)	0~5A(CH1,CH2) 0~3A(CH3)2A(CH4)	328W	1mV 1mA
		UDP3305S-E	4	0~30V(CH1,CH2) 0~6V(CH3)5V(CH4)	0~5A(CH1,CH2) 0~3A(CH3)2A(CH4)	328W	10mV 1mA
		UDP3305C	3	0~30V(CH1,CH2) 1.8V/2.5V/3.3V/5V(CH3)	0~5A(CH1,CH2) 3A(CH3)	315W	10mV 1mA
		UDP3303C	3	0~30V(CH1,CH2) 1.8V/2.5V/3.3V/5V(CH3)	0~3A(CH1,CH2) 3A(CH3)	195W	10mV 1mA
		UDP3303A	3	0~30V(CH1,CH2) 1.8V/2.5V/3.3V/5V(CH3)	0~3A(CH1,CH2) 3A(CH3)	195W	10mV 1mA
UDP1000	UDP1306C	1	0~32V	0~6A	192W	10mV 1mA	
Programmable Switching DC Power Supply	UDP6700	UDP6721	1	0~60V	0~8A	180W	10mV 1mA
		UDP6720	1	0~60V	0~5A	100W	10mV 1mA
Non-Programmable Linear DC Power Supply	UTP3000	UTP3305-II	3	0~32V(CH1,CH2) 5V(CH3)	0~5A(CH1,CH2) 3A(CH3)	335W	10mV 1mA
		UTP3303-II	3	0~32V(CH1,CH2) 5V(CH3)	0~3A(CH1,CH2) 3A(CH3)	207W	10mV 1mA
	UTP3300TFL-II	UTP3315TFL-II	1	0~30V	0~5A	160W	10mV 1mA
		UTP3313TFL-II	1	0~30V	0~3A	96W	10mV 1mA
Non-Programmable Switching DC Power Supply	UTP1000	UTP1310	1	0~32V	0~10A	320W	10mV 1mA
		UTP1306	1	0~32V	0~6A	192W	10mV 1mA

## UDP3000/S Series Programmable Linear Power Supplies



● UDP3305S-E

The UDP3000S Series is a high-performance programmable linear DC power supply. It has a clear LCD user interface, excellent performance indicators, a variety of analysis functions and communication interfaces. It can meet the diversified test needs of users. It aims to provide cost-effective DC programmable power supply equipment for teaching, scientific research, industry and other fields.

- Maximum power up to 328W
- Four channel independent output:
  - CH1/CH2: 0-30V/5A, CH3: 0-6V/3A, CH4: 5V/2A
- Multiple protection: OCP/OVP/OTP
- Excellent load regulation and line regulation
- Ultra low output ripple and noise
- Support one key serial and parallel output function
- The 4.3 inch TFT display can display three channels and multiple parameters at the same time
- List / delayer function to control voltage and current output as required

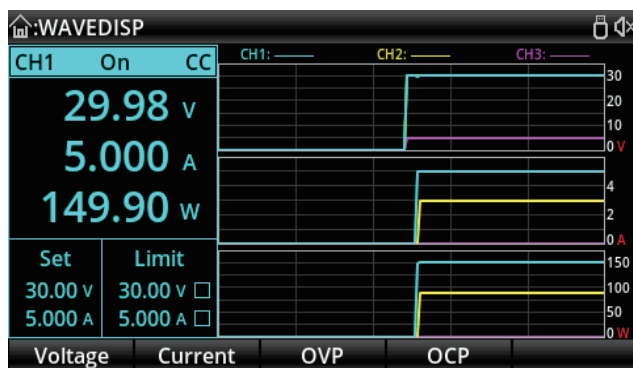
- External trigger function to realize industrial automation control
- Provide USB host, USB device, LAN, RS232, digital IO and other interfaces
- With waveform display function, real-time and dynamic display of output voltage / current / power waveform
- Intelligent speed control of fan can effectively reduce fan noise during operation
- Support 10 groups of file storage and transfer out, and support USB FLASH read and write.



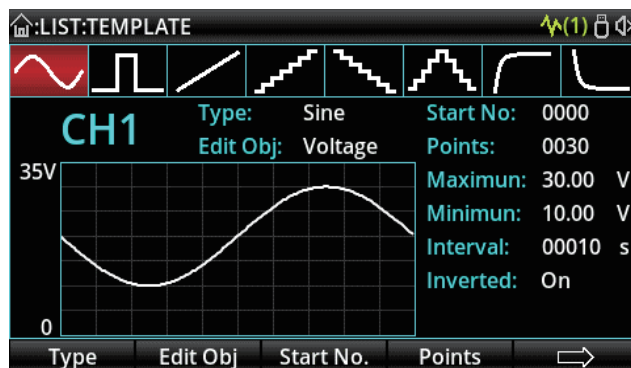
- 4.3 inch LCD provides a human-computer interaction interface with rich functions and simple operation.



- One key series parallel connection provides you with a wider working range of power supply.



- With waveform display function, it can intuitively display the change trend of voltage, current and power.



- Unique list and delayer functions provide convenience for automatic test.

Key Specifications		UDP3303A	UDP3303C	UDP3305C	UDP3305S-E	UDP3305S
Output voltage		0~30V(CH1/CH2);1.8V/2.5V/3.3V/5V(CH3)			0~30V(CH1/CH2);0~6V(CH3); 5V (CH4)	
Output current		0~3A(CH1/CH2);3A(CH3)		0~5A(CH1/CH2);3A(CH3)	0~5A(CH1/CH2);0~3A(CH3); 2A (CH4)	
Output power		195W		315W	328W	
Load regulation	CV	≤0.01%+3mV(≤3A); ≤0.02%+5mV(>3A)			≤0.01%+2mV	
	CC	≤0.2%+3mA			≤0.01%+250μA	
Line regulation	CV	≤0.01%+3mV			≤0.01%+2mV	
	CC	≤0.2%+3mA			≤0.01%+250μA	
Resolution	Voltage	10mV			10mV	1mV
	Current	1mA			1mA	1mA
Programming accuracy	Voltage	≤0.1%+30mV			± (0.3%+20mV)	± (0.03%+10mV)
	Current	<0.5%+2mA			±(0.2%+5mA)	±(0.2%+5mA)
Readback accuracy	Voltage	≤0.1%+30mV			± (0.1%+20mV)	± (0.03%+10mV)
	Current	≤0.5%+2mA			± (0.15%+5mA)	± (0.15%+5mA)
Ripple and noise	Voltage	≤ 1mVrms			<350μVrms/2mVpp(5Hz-1MHz)	
	Current	≤ 3mA rms			≤2mA rms	
Temperature coefficient		≤300ppm			Voltage: 0.01%+5mV; Current: 0.01%+2mA	
Parallel load regulation		≤0.01%+3mV(≤3A); ≤0.02%+5mV(>3A)			≤0.01%+2mV	≤0.01%+2mV
Parallel line regulation		≤0.01%+3mV			≤0.01%+2mV	≤0.01%+2mV
Series load regulation		≤300mV			≤300mV	≤300mV
Series line regulation		≤0.01%+5mV			≤0.01%+3mV	≤0.01%+3mV
Standard interfaces		USB Host (5V/2A, charging port only), Digital I/O	USB Host (5V/2A, charging port only), USB Device, RS-232, Digital I/O		USB Host (5V/2A, charging port only), USB Host, USB Device, LAN, RS-232, Digital I/O	
Power		AC 100V/120V/220V/230V±10%, 50Hz/60Hz			AC 100V/120V/220V/230V±10%, 50Hz/60Hz	
Display		EBTN LCD			4.3 inch LCD	
Product net weight		8.5kg			10.2kg	
Product size(W×H×D)		240mm x 151mm x 327mm			355mmx240mmx168mm	
Standard quantity per carton		1pc			1pc	
Standard carton size		425mm x 335mm x 295mm				
Standard carton gross weight		10.5kg				

Ordering Information	
UDP3000/S Series	UDP3305S:Programmable Linear DC Power Supply(4-Channel, 30V, 5A)
	UDP3305S-E:Programmable Linear DC Power Supply(4-Channel, 30V, 5A)
	UDP3305C:Programmable Linear DC Power Supply(3-Channel, 30V, 5A)
	UDP3303C:Programmable Linear DC Power Supply(3-Channel, 30V, 3A)
	UDP3303A:Non-Programmable Linear DC Power Supply(3-Channel, 30V, 3A)
Standard Accessories	Power cord conforming to the standard of the destination country
	USB interface cable(programmable models only)
	Alligator clip test line:1pair
Optional Accessories	RS232 Communication lines:1pc(programmable models only)

# UDP1000 Series

## Programmable Linear Power Supplies



● UDP1306C

The UDP1306C is a single-channel programmable linear DC power supply, a basic power product designed for users of a smaller size and high reliability power supply. It has low ripple noise, fast transient response, excellent power supply and load regulation and other characteristics. Powerful output function and complete protection function.

- High precision 4-digit display
- Over voltage/current/temperature protection
- Output voltage/current setting viewable
- Shutdown memory/keyboard lock
- Intelligent cooling fan
- USB charging interface
- USB device communication, RS232 program-controlled communication interface
- Remote control (output ON/OFF)
- 5 sets of setup storage: M1-M5



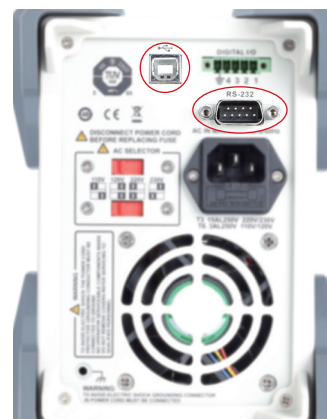
- Single output 32V/6A and USB charging interface 5V/2A



- 5 sets of setup storage: M1-M5



- Over voltage/current/temperature protection



- With RS-232 and USB communication interface function

Key Specifications		UDP1306C
Output voltage		0~32V
Output current		0~6A
Output power		192W
Display mode		3-window, 4-digit voltage and current high precision display
Resolution	Voltage	10mV
	Current	1mA
Load regulation	Voltage	<0.01%+5mV
	Current	<0.1%+10mA
Power regulation	Voltage	<0.01%+3mV
	Current	<0.1%+3mA
Programming accuracy (25°C±5°C)	Voltage	<0.5%+20mV
	Current	<0.5%+10mA
Ripple and noise (20Hz-20MHz)	Voltage	≤2mVrms
	Current	≤3mArms
Temperature coefficient		Current/Voltage: ≤300ppm/°C
Voltage rising/falling time delay		≤100ms(10% rated load)
Standard interfaces		USB Host(5V/2A), USB Device,RS-232
Power		AC 100V/120V/220V/230V±10%,50Hz/60Hz
Display		EBTN LCD
Product net weight		7.5kg
Product size(W×H×D)		136mm x 194mm x 327mm
Standard quantity per carton		1pc
Standard carton size		505mm x 270mm x 335mm
Standard carton gross weight		9.6kg

Ordering Information	
UDP1300C Series	UDP1306C: Programmable Linear DC Power Supply(1-Channel,32V,6A)
Standard Accessories	International standard power cord
	USB interface cable
	Alligator clip test line
Optional Accessories	RS-232 Communication line

# UDP6700 Series

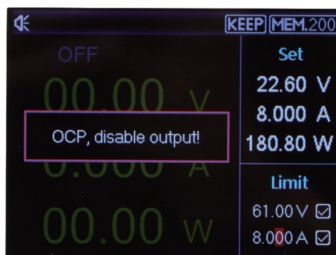
## Programmable Switching Power Supplies



● UDP6721

The UDP6720 /UDP6721 switching DC power supply has a wide range of voltage and current utilization, leading the same type of power supply. The power ratio reaches 3.0. One machine can replace multiple small power supplies to reduce your repeated investment. It is equipped with RS232 communication interface as standard and supports SCPI protocol to facilitate remote control. It has the functions of list and delayer. The remote compensation module can avoid the inaccurate test caused by the voltage drop on the load line. LCD display brings better experience to measurement and debugging.

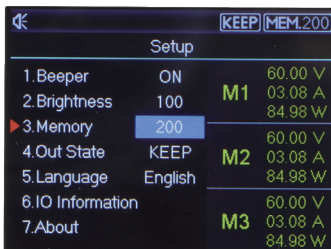
- Fully digital control
- Full scale high resolution:10 mV/1mA
- Low ripple and noise
- Software correction function
- Minimum overall dimension
- LCD display
- Remote compensation
- Support RS232 communication
- Fan intelligent regulation
- Constant voltage and constant current output
- High reliability: overvoltage / overcurrent / overtemperature protection function
- List & delayer function
- The output is controlled by a switch
- High quality and high cost performance
- Multiple groups of output voltage / current can be preset: 3 × 200 groups



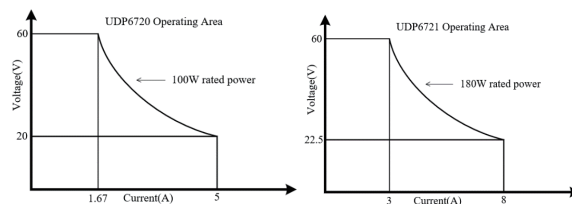
- 2.8 inch LCD provides more interactive content and displays more real-time information.



- Provide OVP / OCP / OTP protection function. The protection values of current and voltage can be set.



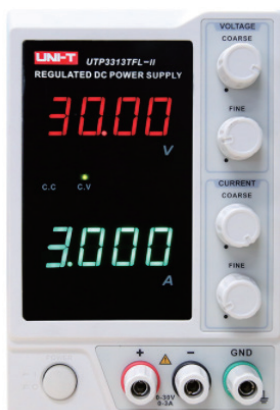
- 3 × 200 sets of setting values can be saved. It can better adapt to diversified and rapid automation applications.



- With high power ratio and wide range output, you can save the purchase of multiple small power supplies.

# UTP3300TFL-II Series

## Non-Programmable Linear Power Supplies



● UTP3313TFL-II

The UTP3000TFL-II Series single-channel linear DC power supplies are economical benchtop tools for DIY electronics hobbyists, electronics manufacturing and testing, and other applications.

- Light weight and concise interface
- 1-channel linear DC power supplies feature
- High-precision 4-digit voltage and current display, 10mV/1mA
- Low ripple/noise
- Auto conversion of constant voltage and current with current limit protection

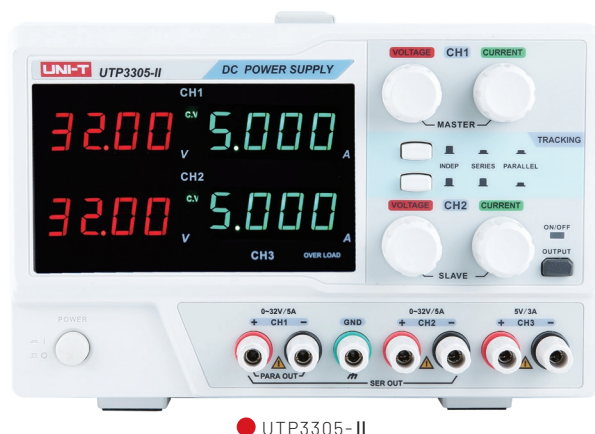
Key Specifications		UTP3313TFL-II	UTP3315TFL-II
Output voltage		0~30V	0~30V
Output current		0~3A	0~5A
Output power		90W	150W
Load regulation	CV	≤0.01%+3mV	≤0.01%+5mV
	CC	≤0.1%+5mA	≤0.1%+10mA
Programming accuracy (25°C±5°C)	Voltage	<0.5%+20mV	<0.5%+20mV
	Current	<0.5%+5mA	<0.5%+10mA
Ripple and noise		≤1mVrms	≤2mVrms
Output regulate resolution	CV	10mV (typical)	
	CC	1mA (typical)	
Reliability		MTBF(e): ≥2000hrs	
Power		Input voltage: 110V/220V±5% AC, Frequency: 50Hz/60Hz	
Display		4 digits LED	
Product net weight		3kg	4kg
Product size (W×H×D)		105mm x 165mm x 249mm	
Standard quantity per carton		4pcs	
Standard carton size		330mm x 285mm x 460mm	
Standard carton gross weight		14kg	17kg

Ordering Information	
UTP3300TFL-II Series	UTP3315TFL-II: Linear DC Power Supply (1-Channel, 30V, 5A, 10mV, 1mA)
	UTP3313TFL-II: Linear DC Power Supply (1-Channel, 30V, 3A, 10mV, 1mA)
Standard Accessories	International standard power cord
	Alligator clip test line



# UTP3000 Series

## Non-Programmable Linear Power Supplies



● UTP3305-II

The UTP3300 Series is three-channel linear DC power supplies of adjustable dual channel and fixed single-channel output, featuring tracking, constant voltage/current, series/parallel output, temperature controlled cooling fan.

- 3-channel linear DC power supplies feature
- High-precision four-digit voltage and current display, 10mV/1mA(UTP3300-II Series)
- Low ripple/noise
- Parallel/series output function
- Output on/off control

Key Specifications		UTP3303-II	UTP3305-II
Output voltage		0~32V (CH1, CH2) , 5V (CH3)	0~32V (CH1, CH2) , 5V (CH3)
Output current		0~3A (CH1, CH2) , 3A (CH3)	0~5A (CH1, CH2) , 3A (CH3)
Output power		207W	335W
Load regulation	CV	<0.01%+3mV	
	CC	≤0.2%+3mA	
Ripple and noise	CV	≤1mVrms	
	CC	≤3mArms	
Output regulate resolution	CV	10mV (typical)	
	CC	1mA (typical)	
Tracking bias	CV	±(0.1% of reading+30mV)	
	CC	±(0.3% of reading+5mA)	±(0.3% of reading+5mA)
Display mode		4-bit voltage and current dual display	
Power		Input voltage: 115V AC/230V AC; Frequency: 47Hz~63Hz	
Display		4 windows, LED	
Product net weight		9.2kg	10.5kg
Product size (W×H×D)		319mm×146mm×226mm	
Standard quantity per carton		1PC	
Standard carton size		465mm×345mm×280mm	
Standard carton gross weight		9.7kg	11.1kg

Ordering Information	
UTP3000 Series	UTP3305-II: Non-Programmable Linear DC Power Supply (3-Channel, 32V, 5A, 10mV, 1mA)
	UTP3303-II: Non-Programmable Linear DC Power Supply (3-Channel, 32V, 3A, 10mV, 1mA)
Standard Accessories	Power cord conforming to the standard of the destination country
	Test output line

# UTP1000 Series

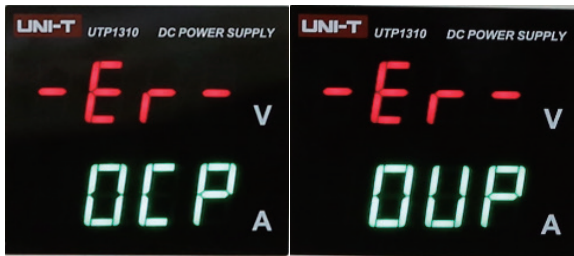
## Non-Programmable Switching Power Supplies



● UTP1310

The UTP1300 Series power supply is an economical switching type DC regulated power supply with single output. It has a pure output, excellent performance indicators, and can meet diverse testing needs. Used in product debugging and maintenance, quality control and testing, production automation testing, teaching experiments, etc.

- Single output
- Output: 32V, 6A/10A
- Resolution: 10mV/1mA
- Over voltage/current protection
- 3 groups of one-key recall of stored datas
- Over current/voltage protection value settable
- Independent output switch



- Overvoltage and overcurrent protection



- 3 groups of one-key recall of stored values and Key lock

Key Specifications		UTP1306	UTP1310
Output voltage		0~32V	0~32V
Output current		0~6A	0~10A
Output power		192W	320W
Load regulation	CV	≤0.1%+5mV	
	CC	≤0.2%+3mA	
Power regulation	CV	≤0.01%+5mV	
	CC	≤0.2%+3mA	
Output regulate resolution	CV	10mV (typical)	
	CC	1mA (typical)	
MTBF(e):		≤2000hrs	
Programming accuracy (25°C±5°C)	Voltage	≤0.1%+1digit	
	Current	≤0.2%+3mA	
Ripple and noise (20Hz~20MHz)	Voltage	≤10mVrms	
	Current	≤5mA rms	

## ■ DC POWER SUPPLIES

General Characteristics		
Power	Input voltage: 110V AC/220V AC, 50Hz-60Hz	
Display	4 digits LED	
Product net weight	2kg	2.5kg
Product size(W×H×D)	80mm x 150mm x 230mm	
Standard quantity per carton	6pcs	
Standard carton size	455mm x 295mm x 450mm	
Standard carton gross weight	12.3kg	16.2kg

Ordering Information	
UTP1000 Series	UTP1310: Switching DC Power Supply(1-Channel, 32V,10A)
	UTP1306: Switching DC Power Supply(1-Channel, 32V, 6A)
Standard Accessories	International standard power cord
	Alligator clip test line

# AC POWER SOURCE

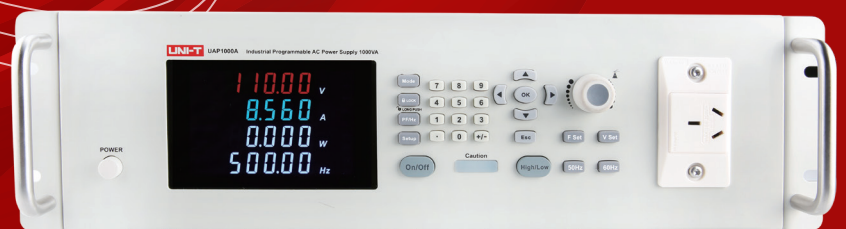
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AC Power Supplies

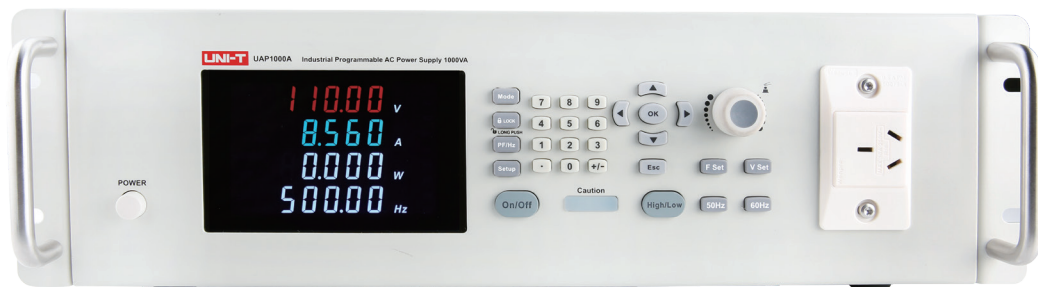
– UAP500/1000A Programmable AC Power Source **NEW**



# Selection Guide

Model	Capacity	Number of phases	Voltage Range	Frequency Range	Current Range	Resolution
UAP500A	500VA	1 $\phi$ 2W	0-300VAC	45-250Hz	4.2A	0.01V 0.01Hz 0.001A
UAP1000A	1000VA	1 $\phi$ 2W	0-300VAC	45-250Hz	8.4A	0.01V 0.01Hz 0.001A

## UAP500/1000A Programmable AC Power Source



● UAP1000A

The UAP500 / 1000A Series programmable AC variable frequency power supply is equipped with digital display screen, with wide measurement range and resolution of 10mV / 1mA. UAP500 / 1000A series has the characteristics of desk type and system type. It can be combined with other instruments at will and integrated into a test system with special functions to meet the measurement requirements in different occasions. The program can be edited through the panel keyboard, which brings great convenience to users. It is a replacement product of ordinary programmable power supply, with high cost performance advantages.

Key Specifications		UAP500A	UAP1000A
Capacity		500VA	1KVA
Generation mode		SPWM(Sinusoidal pulse width modulation)	
Input	Phase number	1 $\phi$ 2W	
	Voltage	220V $\pm$ 10%	
	Frequency	47Hz - 63Hz	
Output	Phase number	1 $\phi$ 2W	
	Voltage	0-150VAC / 0-300VAC AUTO	
	Frequency	45Hz-250Hz(0.01Step)	
Maximum current	L=120V	4.2A	8.4A
	H=240V	2.1A	4.2A
load Stability		0.1%	
Waveform distortion T.H.D		0.3%(low grade 120V, high grade 240V, with pure resistive load)	
Frequency stability		0.01%	
Resolution	Voltage	0.01V	
	Frequency	0.01Hz	
	Current	0.001A	

Key Specifications		UAP500A	UAP1000A
Measurement accuracy	Voltage	±0.5%FS+5dgt	
	Current	±0.5%FS+5dgt	
	Frequency	±0.01%FS+5dgt	
	Power	±0.5%FS+5dgt	
Setting accuracy	Voltage	±1%FS	
	Frequency	±0.1%FS	
Display	Voltage Vrms、Current Arms、Frequency Fre、Power Wattage、Power factor PF		
Storage Memory	M1~M9(V_F_A)		
Current limiting setting	0~Max Current (maximum current: maximum capacity / 240V, i.e. P / 240)		
Output protection	Over Current, Over Temp, Over Load, Short Circuit		
Communication interface	RS232C		
Power	AC 220V±10% ,47Hz-63Hz		
Display	VA code breaking screen		
Product net weight	17.5kg	20.7kg	
Product size	430mm×132mm×483mm		
Standard quantity per carton	1pc		
Standard carton size	660mm×580mm×265mm		

Ordering Information	
UAP500A/1000A Programmable AC Power	UAP500A:500VA,10mV/1mA,1Φ2W
	UAP1000A:1000VA,10mV/1mA,1Φ2W
Standard Accessories	Power cord conforming to the standard of the destination country
	RS232 interface cable

# DC ELECTRONIC LOADS

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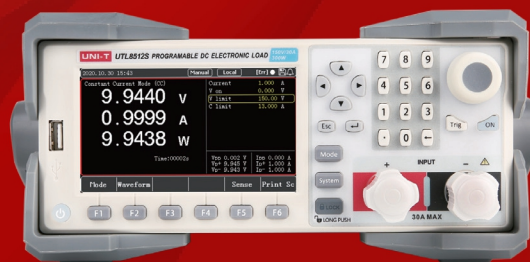
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DC Electronic Loads

— UTL8500 Series

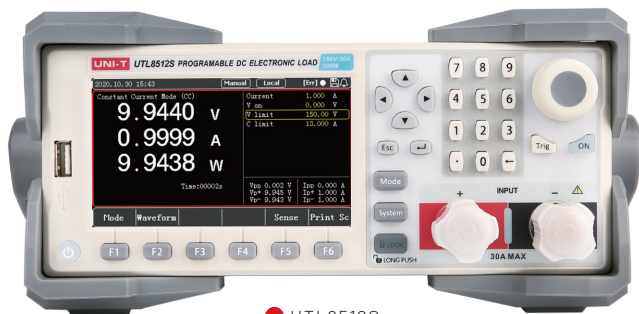
— UTL8200 Series



# Selection Guide

Series	Model	Total Power	Voltage	Current	Highest Frequency	Current Slope	Resolution
UTL8500	UTL8512S	300W	150V	30A	10kHz	3A/μs	0.1mV 0.1mA
	UTL8511S	150W	150V	30A	10kHz	3A/μs	0.1mV 0.1mA
	UTL8513	600W	150V	120A	10kHz	1.5A/μs	0.1mV 0.1mA
	UTL8512	300W	150V	30A	10kHz	3A/μs	0.1mV 0.1mA
	UTL8511	150W	150V	30A	10kHz	3A/μs	0.1mV 0.1mA
	UTL8512B+	300W	500V	15A	10kHz	1.5A/μs	0.1mV 0.1mA
UTL8200	UTL8212	200W×2CH	150V	40A	10kHz	0.15A/μs	1mV 1mA
	UTL8211	400W	150V	20A	10kHz	0.15A/μs	1mV 1mA

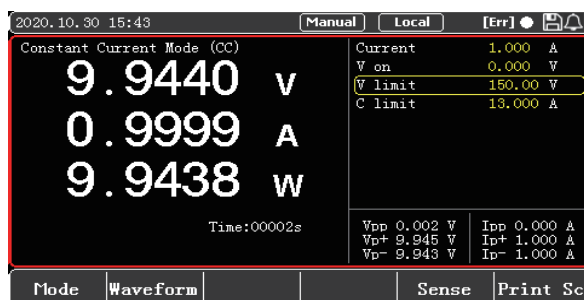
## UTL8500 Series Programmable DC Electronic Loads



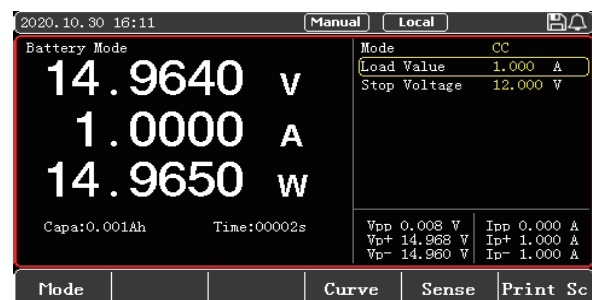
● UTL8512S

The UTL8500 is a cost-effective programmable DC electronic load series with high performance. With a resolution of 0.1mV and 0.1mA, multiple protection mechanisms significantly improve the reliability of the equipment. The series has a variety of testing functions and modes, equipped with RS-232 communication interface, and can be equipped with other communication interfaces according to design and testing requirements.

UTL8500 series provides a flexible, fast and effective solution. Meet different customer's needs from Education, Scientific Research and Manufacturing.

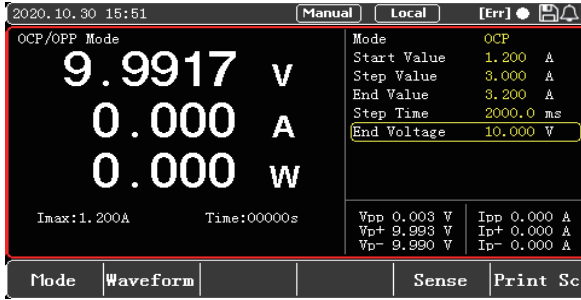


- 4 basic modes: CC/CV/CR/CP and high resolution of 0.1mV/0.1mA

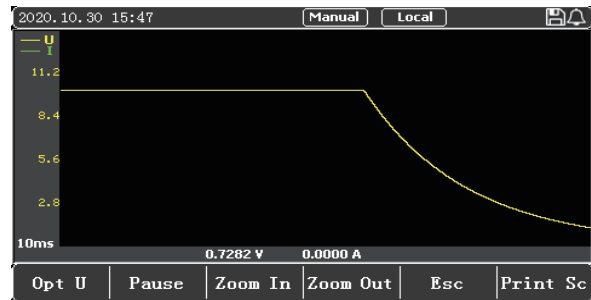


- Battery test function

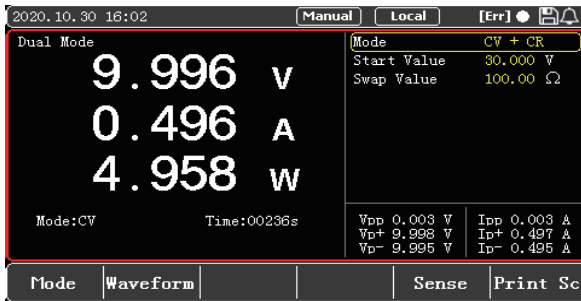




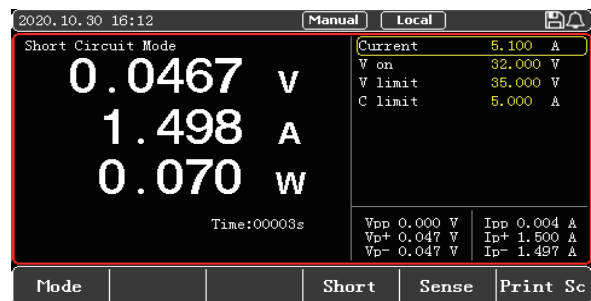
● Multiple protection test and ripple measurement functions



● Real-time waveform display function



● Three combination modes



● Short circuit test

Key Specifications		UTL8511S	UTL8512S	UTL8511	UTL8512	UTL8512B+	UTL8513
Input ratings (0~40°C)	Input voltage	0~150V		0~150V	0~150V	0~500V	0~150V
	Input current	0~3A,0~30A		0~3A,0~30A		0~1.5A	0~15A
	Resolution	0.1mV, 0.1mA					
	Input power	150W	300W	150W	300W	300W	600W
	Min. operating voltage	1.4V at 30A		1.4V at 30A		3V at 15A	2.8V at 120A
CV mode	Range	0~18V, 0~150V				0~50V	0~500V
	Accuracy	±(0.05%+0.025%FS)					
CC mode	Range	0~3A,0~30A				0~1.5A	0~15A
	Accuracy	±(0.05%+0.05%FS)					
CR mode	Range	0.05Ω~7.5KΩ		0.05Ω~7.5KΩ		0.1Ω~25KΩ	0.05Ω~7.5KΩ
	Accuracy	0.1%+0.08%FS					
CP mode	Range	150W	300W	150W	300W	300W	600W
	Accuracy	±(0.1%+0.1%FS)					
Dynamic mode (CC mode)	T1&T2	50μS~99.999S/Res:1μS					
	Accuracy	5μS±100ppm					
	Rise/fall slope	0.001~3.0A/us				0.001~1.5A/us	
	Min rise time	≥10us					
Readback voltage	Range	0~18V,0~150V				0~50V	0~500V
	Accuracy	±(0.025%+0.025%FS)					
Readback current	Range	0~3A,0~30A				0~3A	0~15A
	Accuracy	±(0.025%+0.05%FS)				0.05%+0.05%FS	0.025%+0.05%FS
Readback power	Range	150W	300W	150W	300W	300W	600W
	Accuracy	±(0.1%+0.1%FS)					
Ripple wave measurement	Range	0~0.3V,0~9V		-			
	Accuracy	0.1%+2mV, 0.1%+10mV		-			

Key Specifications		UTL8511S	UTL8512S	UTL8511	UTL8512	UTL8512B+	UTL8513	
Over-power protection		Delay protection when it is $\geq$ set value $\times 1.05$						
		Instant protection when it is $\geq$ set value $\times 1.1$						
		Instant protection when it is $>(\text{FS}+15\text{W})$						
Over-current protection		Delay protection when it is $\geq$ set value $\times 1.05$						
		Delay protection when it is $\geq$ set value $\times 1.05$						
		Instant protection when it is $>(\text{FS}+1.5\text{A})$						
Over-voltage protection		Delay protection when it is $\geq$ set value $\times 1.05$						
		Instant protection when it is $\geq$ set value $\times 1.1$						
		Instant protection when it is $>(\text{FS}+3\text{V})$						
Over-temperature protection		$\geq 85^{\circ}\text{C}$						
Short circuit	Current(CC)	$\leq 3\text{A}, \leq 30\text{A}$				$\leq 1.5\text{A}$	$\leq 15\text{A}$	$\leq 12\text{A}$
	Voltage(CV)	0V						
	Resistance(CR)	35m $\Omega$						
Input terminal resistance		300K $\Omega$			1M $\Omega$		300K $\Omega$	
Interface&protocol		RS232 interface and SCPI protocol						
Power		110V/220V, 50/60Hz						
Display		4.3 inch LCD						
Product size(W×H×D)		214mm × 88mm × 340mm					214mm x 88mm x 520mm	
Product net weight		5.3kg					7.6kg	
Standard quantity per carton		2pcs					2pcs	
Standard carton size		410mm × 310mm × 490mm					410mm x 310mm x 570mm	
Standard carton gross weight		13.5kg			11.6kg		16.2kg	

Ordering Information	
UTL8500 Series	UTL8513: Programmable DC Electronic Load (150V, 120A, 600W)
	UTL8512B+: Programmable DC Electronic Load (500V, 15A, 300W)
	UTL8512: Programmable DC Electronic Load (150V, 30A, 300W)
	UTL8511: Programmable DC Electronic Load (150V, 30A, 150W)
	UTL8512S: Programmable DC Electronic Load (150V, 30A, 300W)
	UTL8511S: Programmable DC Electronic Load (150V, 30A, 150W)
Standard Accessories	Power cord conforming to the standard of the destination country
	250V, 0.5A fuse (Suitable for 110V)

# UTL8200 Series

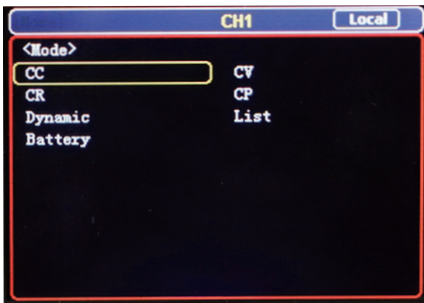
## Programmable DC Electronic Loads



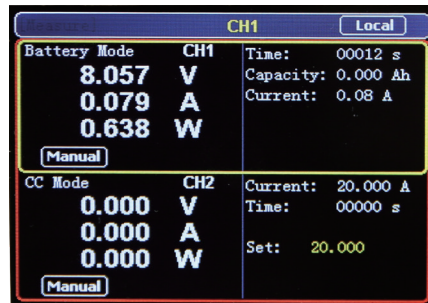
● UTL8212

UTL8200 Series is designed for users requiring a DC load with a compact form factor which are widely used in basic applications such as product production line and maintenance. Small size, easy operation, rich testing functions and modes, support for dual-channel independent testing, the standard RS-232 interfaces for remote communication to meet your diversified test requirements, easy to connect seamlessly with automatic production line and automatic test system (ATS). With a wide range of power measurement, voltage and current measurement speed up to 40kHz, test resolution up to 1mV/1mA, the UTL8200 series is a cost-effective DC load with performance specifications that rival any instrument in its class.

- 4 basic modes: CC/CV/CR/CP
- High resolution: 1mV/1mA
- Up to 40kHz voltage and current testing speed
- Multi-mode battery discharging test
- List mode supports auto test
- Independent short-circuit test
- Protections of over-voltage/under-voltage/over-current/over-power/over-temperature/anti-reverse connection
- Standard RS-232C interface, SCPI protocol is supported



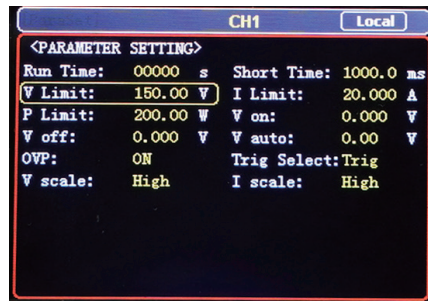
- Built-in 7 test modes



- Battery discharge test



- List test mode



- Multiple protection functions

Technical Specifications		UTL8211	UTL8212
Number of channel		1	2
Input ratings (0~40°C)	Voltage	0~150V	0~150V
	Current	0~4A, 0~40A	0~2A, 0~20A
	Power	400W	2×200W
CV mode	Range	0~18V, 0~150V	
	Accuracy	±(0.05%+0.1% FS)	
CC mode	Range	0~4A, 0~40A	0~2A, 0~20A
	Accuracy	±(0.05% + 0.05%FS)	
CR mode	Range	0.05Ω~7.5KΩ	
	Accuracy	0.1% + 0.5%FS	
CP mode	Range	400W	200W
	Accuracy	0.1% + 0.5%FS	
Dynamic mode	T1&T2	100μS~3600S	
	Accuracy	5μS±100ppm	
	Slope	0.001~0.15 A/μS	
Readback voltage	Range	0~18V, 0~150V	
	Accuracy	±(0.05% + 0.1%FS)	
Readback current	Range	0~4A, 0~40A	
	Accuracy	±(0.05% + 0.1%FS)	0~2A, 0~20A
Readback power	Range	400W	
	Accuracy	±(0.1% + 0.5%FS)	200W
Over-power protection	Set value×1.01,delay protection,max 404W	Set value×1.01,delay protection, max 202W	
	Set value×1.1,instant protection,max 440W	Set value×1.1,instant protection, max 220W	
Over-current protection	Set value×1.01,delay protection,max 40.4A	Set value×1.01,delay protection, max 20.2A	
	Set value×1.1,instant protection, max 44A	Set value×1.1,instant protection, max 22A	
Over-voltage protection	≥152V delay protection, ≥165V instant protection		
Over-temperature protection	≥95°C		
Resolution	1mV/1mA		
Basic mode	CC/CV/CR/CP		
Test mode	Dynamic mode, list mode, battery test		
Protections	Protections of over-voltage/under-voltage/over-current/over-power/over-temperature/ anti-reverse connection		
System setup	Language: Chinese/English, key tone setting		
Data storage	60 sets of data memory		
Interface & protocol	RS-232 interface and SCPI protocol		
PC software	√		
Power	110V/220V, 50/60Hz		
Display	2.8 inch LCD		
Product net weight	3.6kg		
Product size (W×H×D)	300mm x 88mm x 174mm		
Standard quantity per carton	4pcs		
Standard carton size	360mm x 170mm x 280mm		
Standard carton gross weight	20kg		

Ordering Information	
UTL8200 Series	UTL8212: DC electronic load (2-Channel, 20A, 200W)
	UTL8211: DC electronic load (1-Channel, 40A, 400W)
Standard Accessories	International standard power cord
	250V/0.5A fuse (Only suitable for 110V input voltage)

# POWER METERS

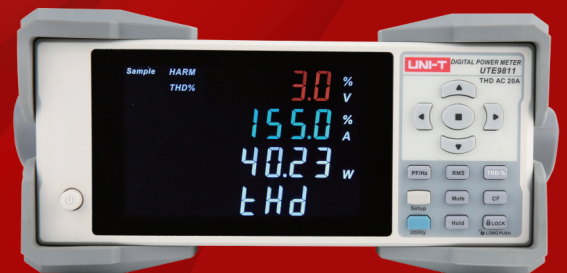
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Selection Guide

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Power Meters

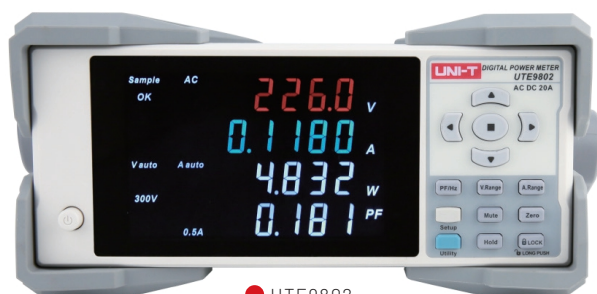
— UTE9800 Series **NEW**



# Selection Guide

Series	Model	Voltage Range	Current Range	Frequency Range	Phase Noise	Measurement mode	Harmonic Analysis
UTE9800	UTE9802	3.0V-600V	0.5mA-20.0A	Base frequency: 40Hz~130Hz, BW: 5KHz	$\pm (0.4\% \text{ reading} + 0.1 \text{ range} + 1 \text{ digit})$	AC, DC, AC +DC(T-RMS)	no
	UTE9811	3.0V-600V	5mA-20.0A	Base frequency: 40Hz-70Hz, BW: 5kHz	$\pm (0.4\% \text{ reading} + 0.1 \text{ range} + 1 \text{ digit})$	AC	yes

## UTE9800 Series Power Meters



● UTE9802



● UTE9811

- VA code breaking screen is displayed in four windows, and the reading is intuitive.
- Multi window simultaneous display of voltage, current, power, power factor / frequency, stable and fast measurement (UTE9802)
- Accuracy of voltage, current and power:  $\pm (0.4\% \text{ reading} + 0.1 \text{ range} + 1 \text{ digit})$
- Power factor accuracy:  $\pm (0.004 + 0.001 / \text{reading} + 1 \text{ digit})$
- Multiple windows simultaneously display the measured voltage, current, power, power factor, frequency, voltage peak ratio and current peak ratio. It also has harmonic analysis, stable measurement and fast measurement (UTE9811)
- Automatic switching of voltage and current range
- Phase locked loop (PLL) synchronization method is adopted, and the maximum harmonic analysis is 50 times (UTE9811)
- The AC / DC type is more suitable for the measurement of half wave rectification, and the true value is AC + DC (only UTE9802)
- With RS-232 / RS-485 serial communication interface, it is convenient to communicate with computer or PLC
- The upper and lower limit alarm parameters of current and power can be set freely, with audible and visual alarm indication

The UTE9800 Series intelligent electric parameter measuring instrument, also known as digital power meter, is an economical and portable measuring instrument. It is a multifunctional measuring instrument integrating voltage, current, power, power factor and frequency. It has high cost performance and is widely used in many fields such as production, testing, quality and scientific research.

Key Specifications		UTE9802	UTE9811
Measurements		V,A,W,PF/HZ	V,A,W,PF/HZ/THD/CF
Measurement method		AC DC AC+DC(T-RMS)	AC
Voltage	Range	3.0V-600V(75V/150V/300V/600V)	3.0V-600V(Auto Range)
	Accuracy	±(0.4% reading + 0.1 range + 1 digit)	±(0.4% reading + 0.1 range + 1 digit)
	Resolution	0.01V	0.1V
Current	Range	0.5mA-20.0A(500mA/2A/8A/20A)	5.0mA-20.0A (Auto range)
	Accuracy	±(0.4% reading + 0.1 range + 1 digit)	±(0.4% reading + 0.1 range + 1 digit)
	Resolution	0.0001A /0.001A/0.01A	0.001A/0.01A
Power	Range	1W-12kW	1W-12kW
	Accuracy	±(0.4% reading + 0.1 range + 1 digit)	±(0.4% reading + 0.1 range + 1 digit)
	Resolution	0.001W/0.01W/0.1W/1W	0.01W/0.1W/1W
Power factor	Range	-1.000-1.000	-1.000-1.000
	Accuracy	±(0.4% reading + 0.1 range + 1 digit)	±(0.4% reading + 0.1 range + 1 digit)
Frequency	Range	Fundamental frequency: 40Hz - 130Hz, bandwidth: 5kHz	Fundamental frequency: 40Hz-70Hz,bandwidth: 5kHz
	Accuracy	±(0.1%reading+1digit)	±(0.1%reading+1digit)
Harmonic analysis	Times	–	1-50times
	Accuracy	–	±(0.3%range+5%reading)
Range switching		Auto / manual	Auto
Automatic range switching	Range increase	The measured value exceeds about 110% of the rated range (CF<3)	The measured value exceeds about 110% of the rated range (CF<3)
	Range reduction	The measured value is less than about 30% of the rated range (CF<3)	The measured value is less than about 30% of the rated range (CF<3)
Preheating time		>30min	>30min
Peak current		Maximum display 24A	Maximum display 24A
Maximum input allowed for connection		Voltage700V, Current 24A	Voltage700V, Current 24A
Instantaneous allowable maximum input		1000V,40A(1s)	1000V,40A(1s)
Input impedance		Voltage: > 5 MΩ, current: < 0.02 Ω	Voltage: > 5 MΩ, current: < 0.02 Ω
Upper and lower limit function		Four settings for upper and lower limits of power and current:	
		P Hi (Power high),	
		P Lo(Power low),	
		A Hi(Current high),	
		A Lo(Current low)	
Interface		RS232, RS485	
		9600、19200、38400、115200 optional	
Display hold		Yes	
loudspeaker mute		Yes	
Key lock		Yes	
Power		AC 100V-240V ,50/60Hz	
Display		VA Broken code screen, 5 digits, four windows	
Product net weight		2.7kg	
Product size (W×H×D)		214mmx88mmx340mm	
Standard quantity per carton		2pcs	
Standard carton size		405mmx330mmx395mm	
Standard carton gross weight		7kg	

Ordering Information	
UTE9800 Series Power Meters	UTE9802:600V, 20A, 40Hz~130Hz
	UTE9811:600V, 20A, 40Hz-70Hz
Standard Accessories	Power cord conforming to the standard of the destination country
	RS232 interface cable
Optional Accessories	UTE-L10A: 10A national standard three plug to banana head power cable x1
	UTE-L16C: 16A test cable with alligator clip x1
	UTE-L16A: 16A national standard three plug to banana head power cable x1

# LCR METERS

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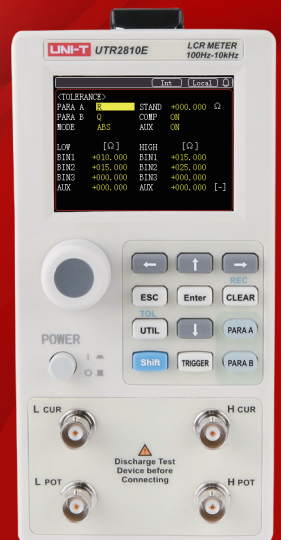
Selection Guide

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LCR Meters

— UT622 Series

— UTR2810 Series **NEW**





# Selection Guide

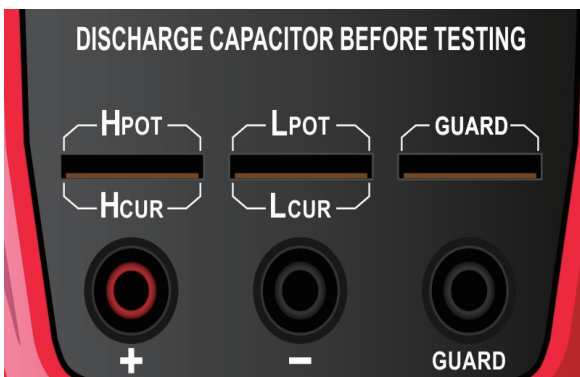
Series	Model	Highest Frequency	Basic Accuracy	Display Count	Measurement Rate	DCR	Display
UT622	UT622E	100kHz	0.10%	99999	20 times/s	yes	2.8 inch TFT LCD
	UT622C	100kHz	0.10%	99999	20 times/s	no	2.8 inch TFT LCD
	UT622A	10kHz	0.10%	99999	20 times/s	no	2.8 inch TFT LCD
UTR2810	UTR2811E	10kHz	0.10%	999999	20 times/s	no	2.8 inch TFT LCD
	UTR2810E	10kHz	0.10%	999999	20 times/s	no	2.8 inch TFT LCD

## UT622 Series Handheld LCR Meters



The UT622 Series Handheld LCR meters feature powerful functions, high accuracy, fast speed, and long standby time. With a clear and intuitive 2.8 inch TFT LCD display, large-capacity rechargeable battery, and up to 100kHz test frequency, the meters can be used for longstanding accurate and convenient measurement in any occasion. They are suitable for the measurement and screening of inductance, capacitance, and resistance in laboratories, production lines, maintenance points etc.

- Up to 100kHz test frequency
- Up to 0.1% measurement accuracy
- High-brightness white backlight
- Max reading of primary parameters:99999 counts; D/Q resolution: 0.0001
- Ultra-low power consumption and long battery life(8 hours)
- Maximum test speed: 20 times/s(UT622E)
- Constant 100Ω output impedance
- Tolerance range: 1%~20%
- Open/short circuit clear function
- Data hold and recording mode
- Standard Mini-USB interface,SCPI command set



- 3-terminal and 5-terminal test ports



- L/C/R/Z main parameter component test



● Tolerance mode used for component sorting



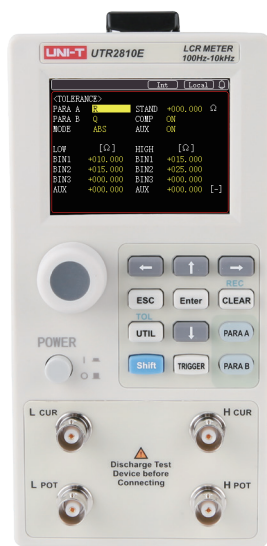
● Recording mode used for statistics

Key Specifications	UT622A	UT622C	UT622E
Test frequency	100Hz, 120Hz, 1kHz, 10kHz	100Hz, 120Hz, 1kHz, 10kHz, 100kHz	100Hz, 120Hz, 1kHz, 10kHz, 100kHz
Test signal level	0.1Vrms, 0.3Vrms, 1Vrms		
Output impedance	100Ω		
Measurement parameters	Primary: L/C/R/Z Secondary: D/Q/θ/ESR		Primary: L/C/R/Z/DCR Secondary: D/Q/θ/ESR
Auto LCR	√		
Test terminals	Three-terminal test jacks, five-terminal test sockets		
Test rate	Fast (20 times/s), medium (5 times/s), or slow (2 times/s)		
DCR test rate	—	—	Fast (20 times/s), medium (5 times/s), or slow (2 times/s)
Ranging mode	Auto/hold		
Tolerance range	1%~20%		
Testing circuit mode	Series/parallel mode		
Clearing correction	Open/short circuit		
Communication interface	Mini-USB		
LED alarm for tolerance	pass: green; fail: red		
Display range			
Display count	99999		
Minimum resolution	0.0001		
Maximum accuracy	0.1%		
L	0.001μH-9999.9H		
C	0.001pF-99.999mF		
Z/R	0.0001Ω-99.999MΩ		
ESR	0.01mΩ-999.99Ω		
D	0.0001-9.9999		
Q	0.0001-99999		
θ	-179.9°~179.9°		
DCR	—	—	0.01mΩ-999.99kΩ
Power	3.7V 1800mAh lithium polymer battery		
Display	2.8 inch TFT LCD 320×240		
Product size (W×H×D)	90mm×190mm×44mm		
Product net weight	305g		
Standard quantity per carton	5pcs		
Standard carton size	335mm x 245mm x 245mm		
Standard carton gross weight	3.9kg		

Ordering Information	
UT622 Series	UT622E:Handheld LCR Meters(100kHz, 0.1%, DCR)
	UT622C:Handheld LCR Meters(100kHz, 0.1%)
	UT622A:Handheld LCR Meters(10kHz, 0.1%)
Standard Accessories	UTR-001:Short circuit board
	UTR-002:Alligator clip test leads with rubber plugs(UT622A)
	UTR-L100k-H:Four-terminal Kelvin test leads(UT622C/E)
	USB interface cable
	5V 1A power adapter
Optional Accessories	UTR-L100kS-H:SMD Kelvin test tweezers
	UTR-L100k-H:Four-terminal Kelvin test leads
	UTR-002:Alligator clip test leads with rubber plugs

# UTR2810 Series

## Benchtop LCR Meters



● UTR2810E

The UTR2810 Series LCR digital bridge is a new generation of low frequency components measuring instrument launched by UNI-T. Small size, light weight, beautiful appearance, simple operation, ultra-high cost performance and good test stability. It can meet the needs of production line quality assurance, incoming inspection and automatic production.

- Test frequency: 100Hz/120Hz/1kHz/10kHz
- Basic accuracy 0.1%
- Test level: 0.1/0.3/1Vrms
- Measurement parameters: C, L, Z, R, X, G, B, Y, Q, D,  $\theta$
- 30  $\Omega$  and 100  $\Omega$  output impedance
- Comparator: four gear, BIN1/BIN2/BIN3/NG
- Fast test speed (30ms/time)
- 2.8 inch TFT LCD display, all measurement results and parameters are clear at a glance
- RS232 communication, following the standard SCPI communication protocol

Key Specifications		UTR2810E	UTR2811E
Test frequency	Frequency range	100Hz,120Hz, 1kHz,10kHz	
	Minimum resolution	Four digit display	
	Accuracy	0.02%	
AC level(0~40°C)	Voltage range	0.1V,0.3V,1V	
	Accuracy	$\pm 10\% \times \text{Set value}$	
Internal resistance of AC source	Resistance	30 $\Omega$ / 100 $\Omega$ Optional	
	Output impedance accuracy	$\pm 5\%$	
Measurement parameters		Cs-Rs, Cs-D, Cp-Rp, Cp-D, Lp-Rp, Lp-Q, Ls-Rs, Ls-Q, Rs-Q, Rp-Q, R-X, Z- $\theta$ r, Z- $\theta$ d, Z-D, Z-Q, Auto LCZ	
Display range		R, X,  Z : 0.00001 $\Omega$ ~ 99.9999M $\Omega$ ; G, B,  Y  : 0.01nS ~ 999.999S; L: 0.00001uH ~ 9999.99H; C: 0.00001pF ~ 9999.99mF; D: 0.00001 ~ 9.99999; Q: 0.00001 ~ 99999.9; $\theta$ d: -179.999° ~ 179.999°; $\theta$ r: -3.14159 ~ 3.14159;	
Test speed (mS / time)		Fast: 30ms; Medium speed: 170ms; Slow speed: 350ms	
Test end configuration		Open circuit, short circuit, load	

Key Specifications	UTR2810E	UTR2811E
Equivalent mode	Series, parallel	
Range mode	Auto, hold	
Trigger mode	Internal, manual, external and bus (only UTR2810E)	
Mathematical operation	Direct reading, $\Delta$ ABS, $\Delta$ %	
Delayed	Trigger delay, step delay: 0 ~ 60.000s, 1ms step	
Comparator	4-gear sorting, BIN1-BIN3, NG,AUX	
Interface	RS232, HANDLER (only UTR2810E)	
Power	AC 110V/220V 50/60Hz	
Display	2.8 inch TFT LCD 240×320	
Product size (W×H×D)	88mm×174mm×275mm	
Product net weight	2.5kg	
Standard quantity per carton	4pcs	
Standard carton size	720mm×390mm×300mm	
Standard carton gross weight	15.7kg (UTR2810E) , 14.6kg (UTR2811E)	

Ordering Information	
UTR2810 Series Benchtop LCR	UTR2810E:Benchtop LCR Meters(10kHz, 0.1%)
	UTR2811E:Benchtop LCR Meters(10kHz, 0.1%)
Standard Accessories	UTR-001:Short circuit board(UTR2810E)
	UTR-L10kE:Kelvin test cable with crocodile clip
	UTR-S100KE:4-wire test box (UTR2810E)
	RS232 Communication cable(UTR2810E)

# BATTERY TESTERS & OHM METERS

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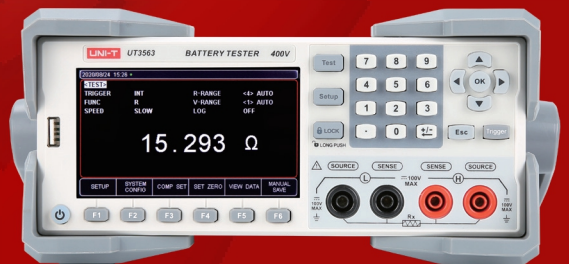
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Battery Testers & Ohm Meters

— UT3550 Series **NEW**

— UT3560 Series

— UT3510 Series



# Selection Guide

Model	Voltage Range	Resistance Range	Accuracy	On-line Measurement	Display
UT3550	0.0001V~100.00V	0.001mΩ~30.00Ω	V: 0.05% R: 0.5%	yes	3.5 inch TFT LCD
UT3563	0.00001V~400.000V	0.0001mΩ~3.2000kΩ	V: 0.01%,R: 0.5%	no	4.3 inch TFT LCD
UT3562	0.00001V~100.000V	0.0001mΩ~3.2000kΩ	V: 0.01%,R: 0.5%	no	4.3 inch TFT LCD

Model	Display Count	Resistance Range	Accuracy	Measurement Rate	Display
UT3516	20000	1μΩ~2MΩ	0.05%	60times/s	4.3 inch TFT LCD
UT3513	20000	1μΩ~20kΩ	0.05%	18times/s	4.3 inch TFT LCD

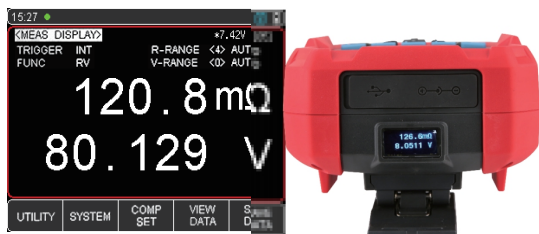
## UT3550 Series Battery Tester



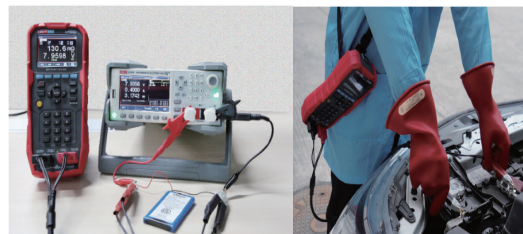
UT3550

The UT3550 is a hand-held battery tester with automatic real-time detection. The portable handheld design allows flexible test scenarios. It is a measuring instrument with high accuracy and high resolution. Equipped with USB type C interface for remote control and data acquisition and analysis. Support SCPI protocol. It is mainly used in the quality inspection of various batteries. UPS can be directly measured online with high accuracy.

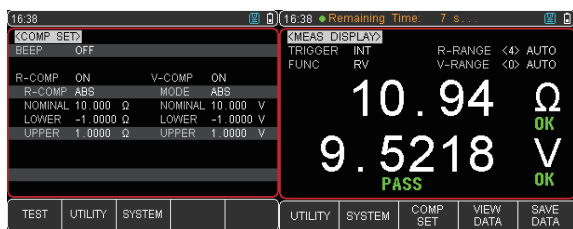
- High-accuracy: Resistance 0.5%/Voltage 0.05%
- Internal resistance measurement range: 0.001mΩ ~ 30.00 Ω
- Voltage measurement range: 0.0001V ~ 100.00V
- Resolution: 0.001mΩ(resistance) - 0.1mV(voltage)
- Comparison mode: SEQ, PER, ABS
- The new AC internal resistance test method, measures almost all types of batteries
- 3.5 inch LCD main display
- 0.96 inch auxiliary display screen
- UPS can be measured directly online
- USB data storage and screenshot saving function
- Lithium battery power supply (2000mAh)
- Provide type C interface to realize remote control
- Support SCPI protocol
- Protection grade IP65



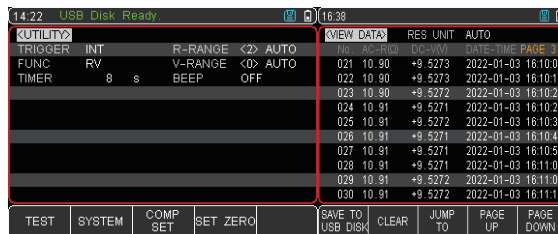
- 3.5 inch LCD, full-color display more content.  
0.96 inch auxiliary screen provides convenience for outdoor operation.



- Support online testing, fixed and mobile scenario testing.



- Three comparison modes: direct reading value, percentage and absolute value. Help you with quick battery screening.



- Set the interval time to automatically record the measurement data. Up to 500 sets of data can be saved. Exportable CSV format documents to USB flash disk to facilitate data analysis.

Key Specifications	UT3550
Voltage range	10V,100V
Voltage resolution	100μV,1mV
Voltage accuracy	±0.05%rdg ±5dgt
Resistance range	3mΩ,30mΩ,300mΩ,3Ω,30Ω
Resistance resolution	1μΩ,10μΩ,100μΩ,1mΩ,10mΩ
Resistance accuracy	±0.5%rdg ±5dgt
Range Mode	Auto and Manual (resistance and voltage)
Calibration	Short circuit full range to zeroed
Testing Speed	1/s (manual range)
Filter function	low limit and conform.Sorting result has two output situations: PASS and FAIL.
Beeper	OFF, OK, NG
Comparison Mode	Absolute deviation (ABS) , Relative deviation (PER) ,Direct-reading (SEQ)
Other Function	Lock keypad, U disk storage, keypad tone, Chines/English language, screenshot
Test Terminal	Four-terminal test method
Trigger	Internal, manual and remote trigger
Storage	Internal 500 groups, exportable CSV files
Interface	Type-c interface(communication)/USB DEVICE(storage) /charge interface
Upper-computer Software	SCPI
Power	AC 100~240V, 50/60Hz
Display	3.5 inch LCD display +0.96 inch OLED on the top
Product size(W×H×D)	114.5mm×251.9mm×85.3mm
Product net weight	0.84kg
Standard quantity per carton	2pcs
Standard carton size	285mm× 240mm × 325mm
Standard carton gross weight	2.1kg



## ■ BATTERY TESTERS & OHM METERS

Ordering Information	
UT3550 Series	UT3550: Battery Testers(100V, 30Ω)
Standard Accessories	Power adapter
	Soft carrying pouch 1pc
	Shoulder belt 1pc
	USB communication cable-Type-C 1pc
	Magnetic strap 1pc
UT3550 kelvin clips wire 1pc	
Optional Accessories	UT3550 crown pen test line

# UT3560 Series Battery Testers

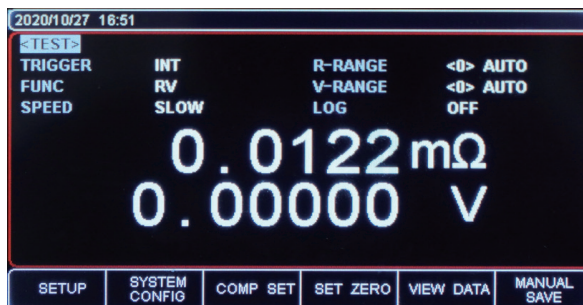


● UT3563



The UT3560 Series Battery Testers contain 2 models: UT3562 and UT3563, which are used to detect the battery internal resistance, include battery module test, battery R&D measurement, high-voltage battery set test, and high-speed assembly line tests of lithium battery, lead-acid battery and button battery.

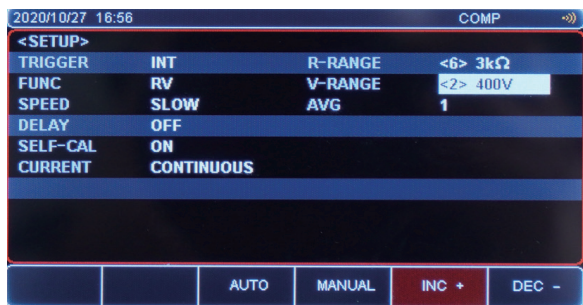
- 31,000-count AC resistance reading, 606,000-count DC voltage reading
- Resistance: 0.0001mΩ~3.2kΩ
- Voltage: 0.00001V~400.000V DC
- Manual range, automatic range switching function
- 0.5% resistance accuracy, 0.01% high precision voltage accuracy
- Handler, RS-232, USB Device interfaces, SCPI and Modbus protocol
- With recording and statistics functions, up to 10,000 sets of data can be calculated
- 4.3 inch large screen LCD display



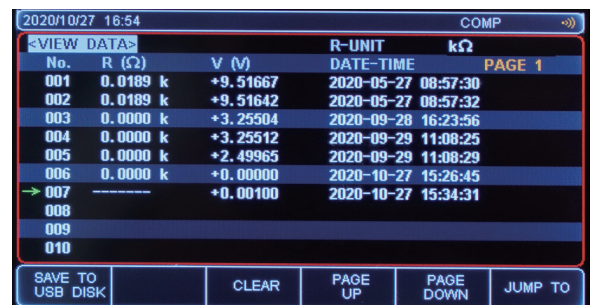
- 5 Resistance readings, 6 voltage readings, high precision and high resolution accuracy



- Can set the impedance and voltage upper and lower limit comparison function



- Manual range, automatic range switching function



- The instrument has record and statistical file management functions

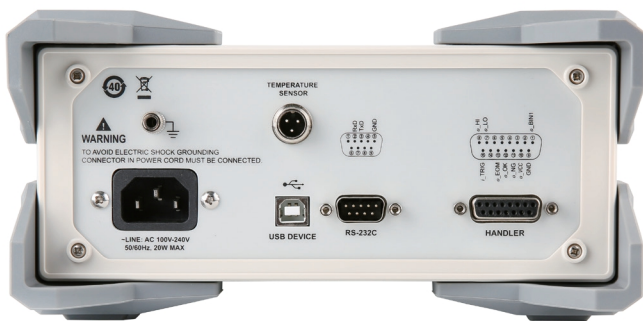
## BATTERY TESTERS & OHM METERS

Key Specifications	UT3562	UT3563
Voltage range	6V/60V/100V	6V/60V/100V/400V
Resolution	Resistance: 0.1 $\mu\Omega$ , Voltage: 10 $\mu$ V	
Speed	Slow/Medium/Rapid/High-speed	
Resistance range	3m $\Omega$ /30m $\Omega$ /300m $\Omega$ /3 $\Omega$ /30 $\Omega$ /300 $\Omega$ /3k $\Omega$	
Temperature coefficient	Voltage: ( $\pm$ 0.001%rdg. $\pm$ 0.3dgt)/ $^{\circ}$ C; Resistance: ( $\pm$ 0.05%rdg. $\pm$ 0.5dgt)/ $^{\circ}$ C	
Basic accuracy	Resistance: 0.5%, Voltage: 0.01%	
Range mode	Auto and manual (resistance and voltage)	
Calibration	Short-circuit full range zeroing	
Sorting function	2 types of sorting result output: PASS/FAIL	
Beeper	OFF, PASS, FAIL	
Comparing method	Absolute tolerance, percentage tolerance, direct-reading comparison	
Button functions	Lock -keyboard lock, Print Sc -screenshot	
System setup	Language: Chinese/English, key tone setting	
Storage	FAT storage function (supports USB disk storage, mobile hard disk drive is not supported)	
Interfaces & protocols	Handler interface, RS-232 and USB communication interface, SCPI and Modbus protocol	
PC software	√	
Power	AC 100~240V, 50/60Hz	
Display	4.3 inch LCD	
Product size (W×H×D)	340mm x 214mm x 89mm	
Product net weight	2.6kg	
Standard quantity per carton	2pcs	
Standard carton size	420mm x 360mm x 405mm	
Standard carton gross weight	8.6kg	

Ordering Information	
UT3560 Series	UT3563: Battery internal resistance tester (400V, 3.2k $\Omega$ )
	UT3562: Battery internal resistance tester (100V, 3.2k $\Omega$ )
Standard Accessories	International standard power cord
	UT-L82: Kelvin test lead x1
	UT-L80: Crowd test lead x1
Optional Accessories	UT-L81: alligator clip test lead

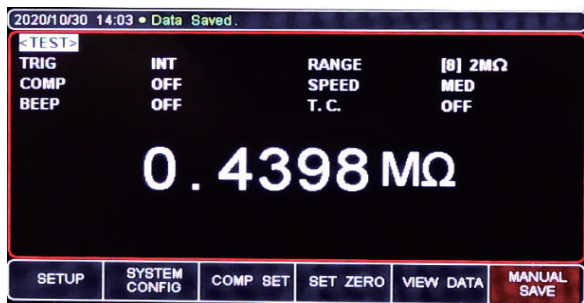
# UT3510 Series

## Micro Ohm Meters

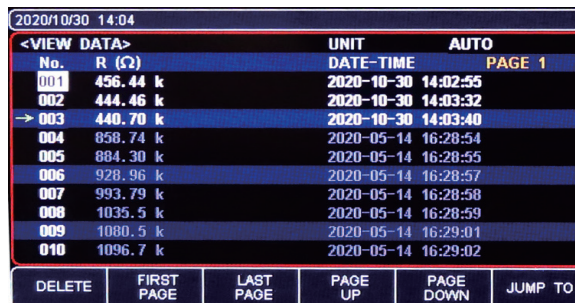


The UT3510 Series Micro Ohm Meters contain 2 models: UT3513 and UT3516, which can be used in professional sorting function, and can judge HI/IN/LO for resistance. The result can be displayed on screen, indicated by buzzer and external I/O output. With enhanced PC remote-control instruction set and compatible with SCPI, the instrument can efficiently process remote-control and data collection function.

- Maximum reading: 22000
- Range mode: Auto/Manual
- Short-circuit full range zeroing calibration
- Sorting functions: 3 types of resistance and voltage input: exceeds upper limit/exceeds lower limit/within the range, 2 types of sorting result output: PASS/FAIL
- Comparing method: absolute tolerance, percentage tolerance, direct-reading comparison
- Button functions: Lock – keyboard lock, OK – screenshot
- Interfaces and protocol: handler interface, RS-232, USB Device and USB Host communication interface, SCPI and Modbus protocol



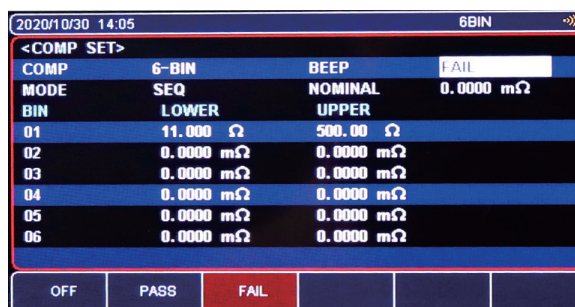
- Automatic, manual, nominal range switching test



- File management, saving and browsing data



- Three test speeds can be selected Rapid: 60 times/s



- Comparator function buzzer selection method

## BATTERY TESTERS & OHM METERS

Key Specifications	UT3513	UT3516
Resistance range	20mΩ/200mΩ/2Ω/20Ω/200Ω/2kΩ/20kΩ	20mΩ/200mΩ/2Ω/20Ω/200Ω/2kΩ/20kΩ/200kΩ/2MΩ
Resolution	1μΩ/10μΩ/100μΩ/1mΩ/10mΩ/100mΩ/1Ω/10Ω/100Ω	
Test current	1A/1A/100mA/10mA/1mA/1mA/100μA/10μA/1μA	
Testing terminal open-circuit voltage	<1V/<1V/<1V/<1V/<5V/<5V/<5V/<5V/<3V	
Measured parameter	DC resistance	
Basic accuracy	Slow: 0.1%, Medium: 0.2%	Slow: 0.05%, Medium: 0.1%, Rapid: 0.5%
Maximum reading	22000	
Range mode	Auto/manual/nominal	
Speed	Slow: 3 times/s, Medium: 18 times/s, Rapid: 60 times/s (Only for UT3516)	
Calibration	Short-circuit full range zeroing	
Sorting function	3 types of resistance and voltage input: exceeds upper limit/exceeds lower limit/within the range, 2 types of sorting result output: PASS/FAIL	
Comparing method	Absolute tolerance, percentage tolerance, direct-reading comparison	
Trigger mode	Internal, external	
Test terminal	Four-terminal measurement	
Button functions	Lock – keyboard lock, OK – screenshot	
System setup	Language: Chinese/English	
Interfaces & protocols	Handler interface, RS232, USB DEVICE and USB HOST communication interface, SCPI and Modbus protocol	
PC software	√	
Power	AC 100~240V, 50/60Hz	
Display	4.3 inch LCD	
Product size (W×H×D)	214mm x 89mm x 340mm	
Product net weight	3kg	
Standard quantity per carton	2pcs	
Standard carton size	420mm x 360mm x 405mm	
Standard carton gross weight	8.5kg	

Ordering Information	
UT3510 Series	UT3516: DC Resistance Tester (2MΩ, accuracy: 0.05%)
	UT3513: DC Resistance Tester (20kΩ, accuracy: 0.1%)
Standard Accessories	International standard power cord
	UT-L82: Kelvin test lead x1
	Temperature compensation line (only for UT3513)
Optional Accessories	Temperature compensation line

# HIPOT TESTERS & DATA LOGGERS

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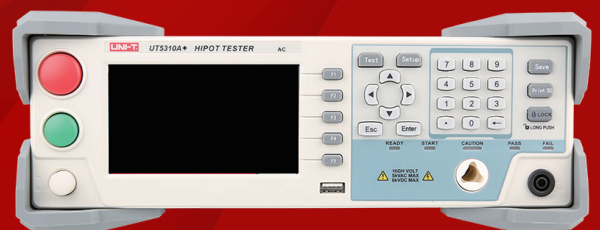
Selection Guide

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Hipot Testers & Data Loggers

— UT3200 Series

— UT5310+ Series **NEW**



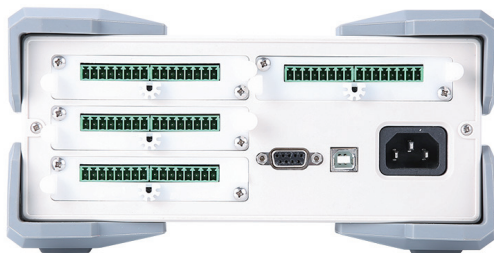
# Selection Guide

Name	Series	Model	Channel	Temperature Range	Resolution	Scanning Speed	Display	Withstand Voltage
Multi-channel Temperature Logger	UT3200	UT3232	32	-200-1800°C	0.1°C	500ms/time	4.3 inch TFT LCD	300V AC/DC
		UT3224	24	-200-1800°C	0.1°C	500ms/time	4.3 inch TFT LCD	300V AC/DC
		UT3216	16	-200-1800°C	0.1°C	500ms/time	4.3 inch TFT LCD	300V AC/DC
		UT3208	8	-200-1800°C	0.1°C	500ms/time	4.3 inch TFT LCD	300V AC/DC
Name	Series	Model	Voltage Range		Resolution		Resistance Range	Accuracy
			AC	DC	AC	DC		
Hipot Tester	UT5310+	UT5320R+	0.050kV-5.000kV	0.050 kV-6.00kV	0.001mA - 20mA	0.1uA - 20.00mA	0.1MΩ - 10GΩ	±(1.0%reading+5V); ±(2.0%reading+5digits)
		UT5310R+	0.050kV-5.000kV	0.050 kV-6.00kV	0.001mA - 10mA	0.1uA - 5.00mA	0.1MΩ - 10GΩ	±(1.0%reading+5V); ±(3.0%reading+2digits)
		UT5310D+	0.050kV-5.000kV	0.050 kV-6.00kV	0.001mA - 10mA	0.1uA - 5.00mA	-	±(1.0%reading+5V); ±(3.0%reading+2digits)
		UT5310A+	0.050kV-5.000kV	-	0.001mA - 10mA	-	-	±(3.0%reading+2digits)

## UT3200 Series Multi-channel Temperature Loggers

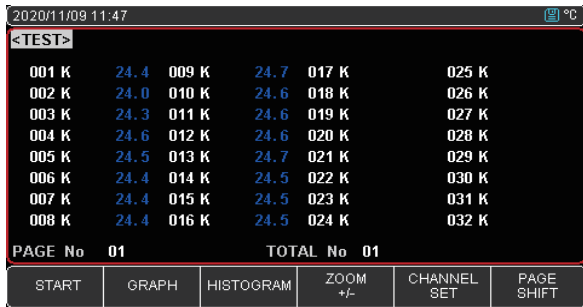


● UT3232



The UT3200 Series Multi-channel Temperature Loggers contain 4 models: UT3208, UT3216, UT3224 and UT3232, which corresponds with thermocouple testing channels of 8, 16, 24 and 32. With 4.3-inch LCD screen, this Series is compatible with multiple temperature sensors, can collect multichannel temperature data simultaneously. The UT3200 Series has advantages of upper/lower limit alarm, fast respond, stable data transmission and thermocouple short-circuit detection.

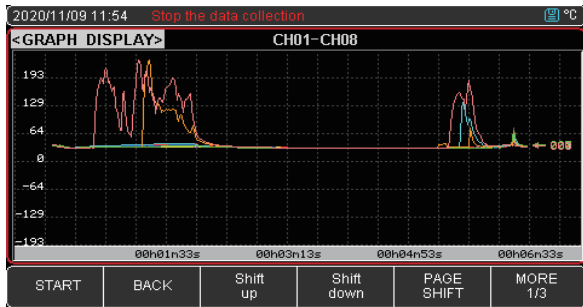
- 4.3 inch LCD screen
- Thermocouple short-circuit automatic detection
- Upper/lower temperature limit alarm settable for each channel
- Specified channel scanning
- Standard RS-232C and USB Device interface, SCPI protocol is supported
- Visual numerical reading, bar chart and curvilinear graph
- Standard USB Host interface, 8G U-disk, USB data storage is supported



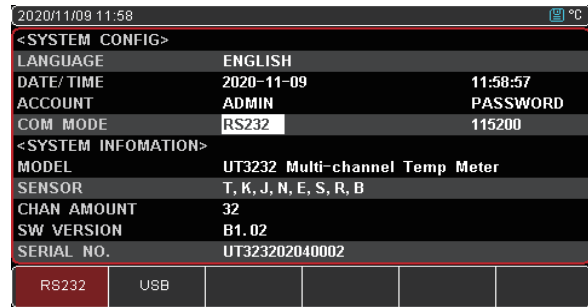
● 32 test channels, 4.3 inch LCD display



● It has a wide range of adaptability and supports K/N/E/J/T/R/S/B thermocouples



● Visual numerical reading, bar chart and curvilinear graph



● File management, Standard RS-232C and USB Device interface, SCPI protocol is supported

Key Specifications	UT3208	UT3216	UT3224	UT3232
Display mode	Visual numerical reading, bar chart and curvilinear graph			
Index No.	Thermocouple: J,K,T,E,S,N,B,R			
Measuring range	-200.0°C~1800.0°C (varies with different thermocouple)			
Resolution	0.1°C			
Number of channel	8	16	24	32
Scanning speed	Fast, slow			
Sorting function	Build-in data sorting, can set upper/lower temperature limit alarm for each channel			
Alarm function	Upper/lower temperature limit alarm			
User calibration	User calibration of each channel is allowed			
Button functions	Lock -keyboard lock, Print Sc -screenshot			
System setup	Language: Chinese/English, key tone setting			
Storage	FAT storage function (supports USB disk storage, mobile hard disk drive is not supported)			
Interface & protocol	RS-232 and USB communication interface, SCPI protocol			
Upper computer software	√			
Display mode	Test temperature range			Accuracy
T-type Thermocouple	-150°C-0°C, 0°C-400°C			±1.0°C, ±0.8°C
K-type Thermocouple	-100°C-0°C, 0°C-1350°C			±1.2°C, ±0.8°C
J-type Thermocouple	-100°C-0°C, 0°C-1200°C			±1.0°C, ±0.7°C
N-type Thermocouple	-100°C-0°C, 0°C-1300°C			±1.5°C, ±0.9°C
E-type Thermocouple	-100°C-0°C, 0°C-850°C			±0.9°C, ±0.7°C
S-type Thermocouple	-100°C-0°C, 100°C-300°C, 300°C-1750°C			±4.5°C, ±3.0°C, ±2.2°C
R-type Thermocouple	0°C-100°C, 100°C-300°C, 300°C-1750°C			±4.5°C, ±3.0°C, ±2.2°C
B-type Thermocouple	600°C-800°C, 800°C-1000°C, 1000°C-1800°C			±5.5°C, ±3.8°C, ±2.5°C



## ■ HIPOT TESTERS & DATA LOGGERS

General Characteristics	
Power	AC 100~240V 50/60Hz
Display	4.3 inch LCD
Product net weight	3.5kg
Product size(W×H×D)	340mm X 214mm X 89mm
Standard quantity per carton	2pcs
Standard carton size	400mm X 340mm X 185mm
Standard carton gross weight	9kg

Ordering Information	
UT3200 Series	UT3232: multichannel thermometers(32 channels)
	UT3224: multichannel thermometers(24 channels)
	UT3216: multichannel thermometers(16 channels)
	UT3208: multichannel thermometers(8 channels)
Standard Accessories	Power cord conforming to the standard of the destination country
	USB interface cable x1
	8G U-disk x1
	Channel identifier x1
	(UT 3208/16/24/32 correspond to 1/2/3/4 set of test lead)
	K-type test lead temperature range: -100~200°C
	UT-T21M: K-type thermocouple test lead module
Optional Accessories	Thermocouple sensor: T,J,Z,N,S,E,B,R,and many more

# UT5310+ Series

## Hipot Tester



● UT5310+

- 4.3 inch TFT LCD, WVGA(800×480)
- Four test modes: AC/DC/IR/OS
- Withstand voltage test: AC 5kV/10mA, DC 6kV/5mA
- Measurement accuracy:  $3\% \pm 2$  digits
- ARC detection function
- Comparator judgment function
- Support storage of up to 10000 test items
- USB host interface, supporting storage and screenshot
- Provide PLC interface, standard RS-232C interface and support SCPI protocol
- Provide upper computer software to support remote control

The UT5310+ Series programmable withstand voltage tester has a new panel and humanized interface design. The fuselage is simple and atmospheric, the interface is neat and beautiful, and the operation is simple and easy to understand. It is widely used in the safety performance inspection of household appliances, transformers, electrical equipment, components, lighting industry and medical equipment. UT5310+ series can not only carry out AC withstand voltage test, DC withstand voltage test and insulation resistance test independently, but also carry out multi item test through the project setting of the test scheme. At the same time, UT5310+ series is equipped with HANDLER for industrial control, RS-232C for connecting computer and USB for data backup, so that the instrument can adapt to the automatic test system with high security and reliability.

Key Specifications		UT5310A+	UT5310D+	UT5310R+	UT5320R+
Withstand voltage					
Output voltage (AC)	Voltage range	0.050kV–5.000kV	0.050kV–5.000kV	0.050kV–5.000kV	0.050kV–5.000kV
	Voltage waveform	Sine wave	Sine wave	Sine wave	Sine wave
	Distortion degree	< 3%	< 3%	< 3%	< 3%
	Operating Frequency	50/60Hz	50/60Hz	50/60Hz	50、60Hz optional
	Frequency accuracy	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
	Output power	50VA (5.000kV 10mA)	50VA (5.000kV 10mA)	50VA (5.000kV 10mA)	100VA(5.000kV 20mA)
Voltage regulation	$\pm(1.0\%+50V)$ (Rated power)	$\pm(1.0\%+50V)$ (Rated power)	$\pm(1.0\%+50V)$ (Rated power)	$\pm(1.0\%+50V)$ (Rated power)	
Output voltage (DC)	Voltage range	—	0.050 kV–6.000kV	0.050 kV–6.000kV	0.050 kV–6.000kV
	Signal source frequency	—	600Hz	600Hz	600Hz
	Output power	—	30VA (6.000kV 5mA)	30VA (6.000kV 5mA)	60VA (6.000kV 10mA)
	Voltage regulation	—	$\pm(1.0\%+100V)$ (Rated power)	$\pm(1.0\%+100V)$ (Rated power)	$\pm(1.0\%+100V)$ (Rated power)
Voltage resolution	1V	1V	1V	1V	
Voltage output accuracy	$\pm(1.0\% \text{Set value}+5V)$ (No load)	$\pm(1.0\% \text{Set value}+5V)$ (No load)	$\pm(1.0\% \text{Set value}+5V)$ (No load)	$\pm(1.0\% \text{Set value}+5V)$ (No load)	
Voltage test accuracy	$\pm(1.0\% \text{Reading}+5V)$	$\pm(1.0\% \text{Reading}+5V)$	$\pm(1.0\% \text{Reading}+5V)$	$\pm(1.0\% \text{Reading}+5V)$	
Maximum output current	—	—	5mA	10mA	
Maximum output power	—	—	12.5VA (2500V/5mA)	25VA (2500V/10mA)	
Output instantaneous short-circuit current	—	—	>10mA(Set output voltage>500V)	>20mA(Set output voltage>500V)	
Load regulation	—	—	$\leq 1\%$ (Rated power)	$\leq 1\%$ (Rated power)	
Ripple (1kV)	—	—	$\leq 3\%$ (1kV, No load)	$\leq 3\%$ (1kV, No load)	
Discharge function	—	—	Automatic discharge after test	Automatic discharge after test	
Resistance measurement range	—	—	0.2M $\Omega$ –10G $\Omega$	0.1M $\Omega$ –10G $\Omega$	

# HIPOT TESTERS & DATA LOGGERS

Key Specifications		UT5310A+	UT5310D+	UT5310R+	UT5320R+
Resistance display range(1000V)		—	—	5mA 0.2 MΩ-1 MΩ 1mA 1 MΩ-10 MΩ 100uA 10 MΩ-100 MΩ 10uA 100 MΩ-1GΩ 1uA 1GΩ-10GΩ	10mA 0.1 MΩ-0.5MΩ 2mA 0.5 MΩ-5 MΩ 200uA 5MΩ-50MΩ 20uA 50 MΩ-500MΩ 2uA 500MΩ-10GΩ
Accuracy of resistance measurement		—	—	≥500V 1MΩ-1GΩ: ±5%±5 digits, 1GΩ-10GΩ : ±10%±5 digits; <500V 0.2MΩ-1GΩ: ±10%±5 digits 1GΩ-10GΩ For reference only, no accuracy requirements	≥500V 1MΩ-1GΩ ±(5%Reading+5digits) 1GΩ-10GΩ ±(10%Reading+5digits) <500V 0.1MΩ-1GΩ ±(10%Reading+5digits) 1GΩ-10GΩ For reference only, no accuracy requirements
Current measurement accuracy		—	—	±(1.5%reading+5digits) (after clearing)	±(1.5%reading+5digits) (after clearing)
ARC Detector					
Measuring range	AC	Off, level 1~9			
	DC	Off, level 1~9			
Comparator					
Discrimination mode		Window comparison mode Current lower limit ON: pass when $I_{lower\ limit} < I_x < I_{upper\ limit}$ ; When $I_x \leq I_{lower\ limit}$ or $I_x \geq I_{upper\ limit}$ , fail. ( $I_{lower\ limit} < I_{upper\ limit}$ ) Current lower limit OFF: when $I_x < I_{upper\ limit}$ , pass; When $I_x \geq I_{upper\ limit}$ , fail. The discrimination method of insulation resistance is the same as above			
Current upper limit setting	AC	0.001mA - 10mA	0.001mA - 10mA	0.001mA - 10mA	0.001mA - 20mA
	DC	0.1uA - 5mA	0.1uA - 5mA	0.1uA - 5mA	0.1uA - 10mA
Current lower limit setting (LOWER OFF)	AC	0.001mA - 10mA	0.001mA - 10mA	0.001mA - 10mA	0.001mA - 20mA
	DC	0.1uA - 5mA	0.1uA - 5mA	0.1uA - 5mA	0.1uA - 10mA
Resistance upper limit setting		OFF, 0.1MΩ - 10GΩ	OFF, 0.1MΩ - 10GΩ	OFF, 0.1MΩ - 10GΩ	OFF, 0.1MΩ - 10GΩ
Resistance lower limit setting		0.1MΩ - 10GΩ	0.1MΩ - 10GΩ	0.1MΩ - 10GΩ	0.1MΩ - 10GΩ
Discriminant output		PASS/FAIL LCD and LED display respectively and sound alarm			
Interface & protocol		USB host, HANDLER, RS232C, Optional RS485, SCPI protocol			
Upper computer software		Yes			
Power		AC 110V/220V±10% 50-60Hz			
Display mode		4.3 inch LCD screen			
Product size (W×H×D)		295mm×117.6mm×465mm			
Product net weight		8.3kg			
Standard quantity per carton		1pc			
Standard carton size		595mm×440mm×240mm			
Standard carton gross weight		9.5kg			

Ordering Information	
UT5320+ Series	UT5320R+ AC / DC / IR programmable insulation withstand voltage tester (20mA)
UT5310+ Series	UT5310R+ AC / DC / IR programmable insulation withstand voltage tester (10mA)
	UT5310D+ AC / DC programmable withstand voltage tester(10mA)
	UT5310A+ AC programmable withstand voltage tester (10mA)
Standard Accessories	Power cord conforming to the standard of the destination country
	Red black test clip 1 pair
	High voltage rod test line (small type & no switch)
Optional accessory	UT-L63:High voltage rod test line
	UT-L62:Remote control high voltage rod test line(support remote start)

# Accessories



UT-H01 Passive probe 25MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 25MHz
- Input resistance: 1x:1MΩ±2%, 10x:10MΩ±2%
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Application: UTD1025CL, UTD1025C (only for handheld type)
- Amount: 1pc



UT-H03 Passive probe 60MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 60MHz
- Input resistance: 1x:1MΩ±2%, 10x:10MΩ±2%
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Application: UTD1050CL, UTD1062C (only for handheld type)
- Amount: 1pc



UT-H04 Passive probe 100MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 100MHz
- Input resistance: 1x:1MΩ±2%, 10x:10MΩ±2%
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Application: UTD1000C, UTD1000L Series (only for handheld type)
- Amount: 1pc



UT-H05 Passive probe 200MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 200MHz
- Input resistance: 1x:1MΩ±2%, 10x:10MΩ±2%
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Application: UTD1000C, UTD1000L Series (only for handheld type)
- Amount: 1pc



UT-P01 Passive probe 25MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 25MHz
- Input resistance: 1x:1MΩ±2%, 10x:10MΩ±2%
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Application: UTD2025CL
- Amount: 1pc



UT-P03 Passive probe 60MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 60MHz
- Input resistance: 1x: 1MΩ±2%, 10x: 10MΩ±2%
- Working voltage: 1x: 300Vpp, 10x: 600Vpp
- Application: UTD2052CL, UTD2052CEX, UTD2062CM
- Amount: 1pc



UT-P04 Passive probe 100MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 100MHz
- Input resistance: 1x:1MΩ±2%, 10x:10MΩ±2%
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Application: UPO2000E Series, UTD2000CEX Series, UTD2000M Series
- Amount: 1pc



UT-P05 Passive probe 200MHz

- Probe factor: (1:1/10:1)
- Bandwidth: 200MHz
- Input resistance: 1x:1MΩ±2%, 10x:10MΩ±2%
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Application: MSO3152/4E, UPO3152/4E, UTD2202CM, UTD2202CEX+, UTD2152CL
- Amount: 1pc



UT-P08 Passive probe

- Probe factor: 1:1,10:1
- Bandwidth: 350MHz
- Input resistance: 1x: 1MΩ±2%, 10x: 10MΩ±2%
- Working voltage: 1x: 300Vpp, 10x: 600Vpp



UT-P07 Passive probe 500MHz

- Probe factor: 10:1
- Bandwidth: 500MHz
- Input resistance: 10MΩ
- Working voltage: 1x:300Vpp, 10x:600Vpp
- Amount: 1pc



UT-V23 100:1 High voltage probe

- Probe factor: 100:1
- Bandwidth: 100MHz
- Input resistance:  $10M\Omega \pm 2\%$
- Working voltage: 2000Vpp
- Application: used for all oscilloscopes series
- Amount: 1pc



UT-P21 Passive high voltage probe 50MHz 15V

- Bandwidth: 50MHz
- Attenuation: 1000:1
- Maximum working voltage: DC 15kVrms/AC 10kV(sine wave )
- Application: used for all oscilloscopes series
- Amount: 1pc



UT-P31 High voltage differential probe 100MHz 1.5kV

- Bandwidth: 100MHz
- Attenuation ratio: 100:1/10:1
- Input differential voltage:  $\pm 1.5kVpp$
- Application: used for all oscilloscopes series
- Amount: 1pc



UT-P33 Differential probe 120MHz 14kV

- Bandwidth: 120MHz
- Attenuation ratio : 100:1/10:1
- Input differential voltage:  $\pm 14kVpp$
- Application: used for all oscilloscopes series
- Amount: 1pc



UTE-L10A Three plug banana head connecting wire (national standard)

- Current: 10A
- Application: intelligent electric parameter tester series (power meter)



UT-P20 Passive probe 250MHz 1500V

- Bandwidth: 250MHz
- Attenuation: 100:1
- Maximum working voltage: 1500Vrms
- Application: used for all oscilloscopes series
- Amount: 1pc



UT-P30 Differential probe 100MHz 800V

- Bandwidth: 100MHz
- Attenuation ratio: 100:1/10:1
- Input differential voltage:  $\pm 800Vpp$
- Application: used for all oscilloscopes series
- Amount: 1pc



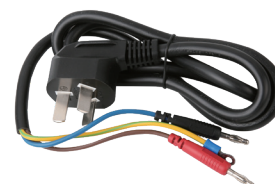
UT-P32 Differential probe 50MHz 3kV

- Bandwidth: 50MHz
- Attenuation ratio : 1000:1/100:1
- Input differential voltage:  $\pm 3kVpp$
- Application: used for all oscilloscopes series
- Amount: 1pc



UTE-L16C1 Alligator clip connecting wire

- Current: 16A
- Application: intelligent electric parameter tester series (power meter)



UTE-L16A Three plug banana head connecting wire (national standard)

- Current: 16A
- Application: intelligent electric parameter tester series (power meter)



UT-D14 USB 2.0 dual-head printer line

- Wire length: 1.5m
- Suitable products: UTD2000 Series, UPO2000E Series, UTG2025A
- Amount: 1pc



UT-D15 USB2.0 communication cable

- Wire length: 1.5m
- Suitable products: UTD2025CL, UTD2052CL
- Amount: 1pc



UT-D17 USB2.0 data cable

- Features: one head for HOST, the other for MINI-USB
- Wire length: 1.5m
- Suitable products: UTD1000L Series
- Amount: 1pc



UT-M03 Voltage/current converter

- Range: 4mA/6mA, 40mA/60mA, 400mA/600mA
- Suitable products: UTD1000C Series
- Amount: 1pc



UT-M04 Voltage/current converter

- Range: 4A/6A
- Suitable products: UTD1000C Series
- Amount: 1pc



UT-M07 10A current diverter

- Range: 10A
- Suitable products: UTD1025CL, UTD1050CL
- Amount: 1pc



UT-M08 Lithium battery subassembly

- Output voltage: 7.4V
- Capacity: 3600mAh
- Suitable products: UTD1000L Series
- Amount: 1pc



UT-M10 Voltage/current converter

- Range:  $\mu$ A, 40mA, 400mA
- Suitable products: UTD1025DL, UTD1050DL
- Amount: 1pc



UT-L45 BNC-BNC through leads

- Material: 50 $\Omega$  coaxial cable
- Length: 1000mm
- Features and application: dual-head BNC interface, used for UTG9000T, UTG4000A, UTG2000B, UTG2000A, UTG1000A, UTG9000C-II, UTG900E Series
- Amount: 1pc



UT-U02 Digital protocol cable

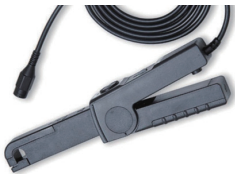
- Channels: 16
- Suitable products: UTG4000A series
- Amount: 1pc



- UT-P35 High voltage Differential probe
- Bandwidth: 50MHz
  - Precision: 2%
  - Attenuation: 50:1, 500:1
  - Maximum differential mode input voltage:  $\pm 130V_{pp}$ ,  $\pm 1300V_{pp}$
  - Application: used for all oscilloscopes series



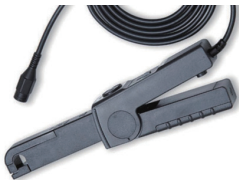
- UT-P36 High voltage Differential probe
- Bandwidth: 100MHz
  - Precision: 2%
  - Attenuation: 200:1, 2000:1
  - Maximum differential mode input voltage:  $\pm 560V_{pp}$ ,  $\pm 5600V_{pp}$
  - Application: used for all oscilloscopes series



- UT-P40 Current probe
- Bandwidth: DC-100kHz
  - Conversion ratio: 50mV/A, 5mV/A
  - Current range: 0.4A-60A
  - Maximum working voltage: 600Vrms
  - Maximum measuring wire diameter: 11mm
  - Application: used for all oscilloscopes series



- UT-P41 Current probe
- Bandwidth: DC-100kHz
  - Conversion ratio: 100mV/A, 10mV/A
  - Current range: 50mA-100A
  - Maximum working voltage: 600Vrms
  - Maximum measuring wire diameter: 11mm
  - Application: used for all oscilloscopes series



- UT-P42 Current probe
- Bandwidth: DC-150kHz
  - Conversion ratio: 50mV/A, 5mV/A
  - Current range: 0.4A-200A
  - Maximum working voltage: 600Vrms
  - Maximum measuring wire diameter: 11mm
  - Application: used for all oscilloscopes series



- UT-P43 Current probe
- Bandwidth: DC-25MHz
  - Conversion ratio: 100mV/A
  - Current range: 20mA-20A
  - Maximum working voltage: 600Vrms
  - Maximum measuring wire diameter: 4.5mm
  - Application: used for all oscilloscopes series



- UT-P44 Current probe
- Bandwidth: DC-50MHz
  - Conversion ratio: 50mV/A
  - Current range: 20mA-40A
  - Maximum working voltage: 600Vrms
  - Maximum measuring wire diameter: 4.5mm
  - Application: used for all oscilloscopes series



- UT-M15 Logic analyzer probe
- Number of channels: 16
  - Input impedance: 101k $\Omega$
  - Minimum voltage swing: 500mV
  - Minimum detectable pulse width: 5ns
  - Threshold accuracy:  $\pm 100mV + 3\%$  set value
  - Input capacitance: 8.0pF
  - Probe length: 1m
  - Probe length: 1m
  - Application: used for all MSO series oscilloscopes



UT-U02 Digital protocol cable

- Number of channels: 16
- Application: UTG4000A series



UT-L02 BNC to alligator clip test line

- Probe length: 1m
- Crocodile clip opening length: 3mm
- Safety level: CAT II 600V 2A
- Application: Conversion connection for instrument measurement



UT-L39 BNC to alligator jacketed test line

- Probe length: 1000±50mm
- Wire: double insulated wire
- Application: Conversion connection for instrument measurement



UT-L41 Alligator clip short test lead

- Probe length: 110-130mm
- Wire core: 19 / 20 cores
- Features: full protection of input crosshead
- Application: all benchtop multimeter



UT-L45 BNC-BNC line

- Probe length: 1000mm
- Wire rod: 50Ω concentric cable
- Application: all functions / arbitrary waveform generator



UT-L80 Crown probe test lines  
(four terminal connection type)

- Application: Battery tester series



UT-L81 Alligator clip test lead  
(four-terminal wiring type)

- Application: Battery tester series



UT-L82 Kelvin test lead  
(four-terminal wiring type)

- Application: Battery tester series, DC resistance tester series





UT-T20 Temperature compensation probe (BNC)  
 ● Application: Multi-channel temperature tester series



UT-T21M K-type thermocouple test wire module  
 ● Application: Multi-channel temperature tester series



UT-W01 Power Adapter  
 ● Input: AC 100~240V 50Hz/60Hz  
 ● Output: DC 9V 4A  
 ● Certification: ERP



UT-F01 Fuse  
 ● Parameter:  $\Phi 6.35 \times 31.8$ mm, 500mA/600V  
 ● Brand: HOLLY  
 ● Certification: CE



UT-F08 Fuse  
 ● Parameter:  $\Phi 6.35 \times 31.8$ mm, 600mA/1000V  
 ● Brand: HOLLY  
 ● Certification: TUV



UTR-001  
 ● LCR short-circuit calibration sheet  
 ● Application: LCR tester



UTR-002 Capacitor clamp short test lead  
 ● Application: UT622 series



UTR-L100k-H Four-terminal Kelvin test line  
 ● Frequency: 100KHz  
 ● Application: UT622 series



UTR-L100kS-H SMD Kelvin test pliers  
 ● Frequency: 100KHz  
 ● Application: UT622 series



UTR-S10k 4-wire test box (double lock)  
 ● Frequency: 10KHz  
 ● Application: benchtop LCR series



UTR-L10k Kelvin test line (four ends)  
 ● Frequency: 10KHz  
 ● Application: benchtop LCR series



UTR-S100k 4-wire test box (double lock)  
 ● Frequency: 100KHz  
 ● Application: benchtop LCR series



UTR-L1M Kelvin test line  
(with shielding box)

- Frequency:1MHz
- Application: benchtop LCR series



UTR-L1MS SDM 4 clamp  
(with shielding box)

- Frequency:1MHz
- Application: benchtop LCR series



UTS-C01 RF converter (BNC)

- Application: spectrum analyzer series



UTS-C02 RF converter (SMA)

- Application: spectrum analyzer series



UTS-C03 RF cable (SMA)

- Application: spectrum analyzer series



UTS-C04 2.4G antenna

- Application: spectrum analyzer series

# UNI-T®



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