

# **Data Sheet**

# **UTG2000X Series Function/Arbitrary Waveform Generator**

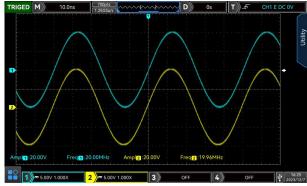
V 1.1 July 2024

## **Product Features**

- Dual channel with a maximum frequency output of 120 MHz and a maximum output amplitude of 20 Vpp.
- 625 MSa/s sample rate and 16-bit vertical resolution
- Multiple analog and digital modulation function: AM, PM, FM, DSB-AM, ASK, PSK, BPSK, QPSK, FSK, 3FSK, 4FSK, QAM, OSK, PWM, and SUM
- Square wave with the maximum frequency of 50 MHz and low jitter
- Wide dynamic and high-precision pulse wave with adjustable edge time, which can achieve fine
   edge time adjustment and has extremely high adjustment resolution and range
- Excellent performance with low harmonic distortion
- Supports frequency sweep and burst output
- A low-jitter waveform can be generated point by point, with an arbitrary waveform length ranging from 8 points to 64 megapoints (Mpts)
- Supports channel copying, following, and stacking settings
- Can generate arbitrary waveform through arbitrary waveform editor on the upper computer
- 7-bit hard frequency counter
- Built-in 200 arbitrary waves
- Standard USB Host, USB Device, and LAN interface
- Support SCPI (programmable instrument standard commands)
- 4.3 inch TFT LCD capacitive touch display screen

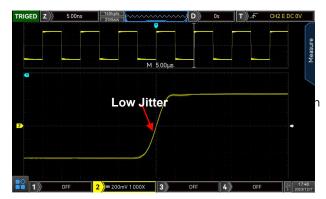
# **Design Features**

# **Equivalent performance of double channel output**



Large output under the high frequency: double channel with full amplitude output of 20 Vpp can be output under the frequency of 20 MHz.

#### **Low Jitter**

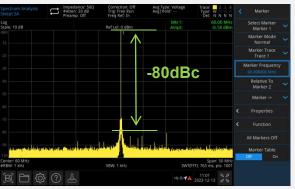


Excellent digital sampling technology significantly reduces output waveform jitter.

## **Low Distortion Output**

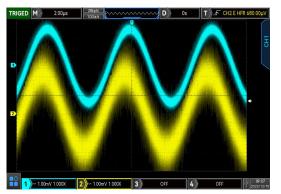


Outstanding harmonic distortion



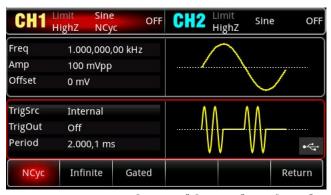
-80dBc spurious free dynamic range

## **High Signal to Noise Ratio**



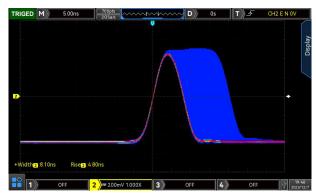
A small signal superimposed with a large DC results in a lower output noise and a higher SNR.

#### **Burst**



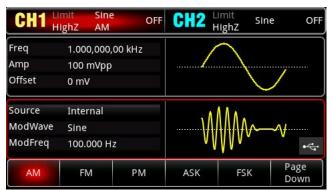
Three types of bursts: "N cycle," "Infinite," and "Gate." Three trigger sources: "Internal," "External," and "Manual."

#### **Pulse Wave and Edge Time**



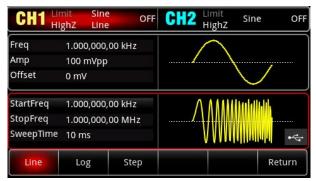
The new generation of wide dynamic, high-precision, edge-time adjustable pulse wave has a minimum pulse width of 8 ns. The pulse width can be fine adjusted and the minimum step is 100 ps. In addition, it can produce higher harmonic component, which has the feature of a dedicated pulse generator. The edge time can be independently set to a minimum of 5 ns.

## **Multiple Modulation Function**



Modulation output (15 types): AM, FM, PM, DSB-AM, ASK, FSK, PSK, 3FSK, 4FSK, BPSK, QPSK, OSK, SUM, QAM and PWM.

#### **Sweep Frequency**



Three sweep frequency modes: "Line", "Log" and "Step". Three trigger sources: "Internal", "External" and "Manual".

#### **Frequency Counter**



The high precision hardware frequency counter can measure the frequency range of 100 mHz to 200 MHz.

## **Channel Merge**





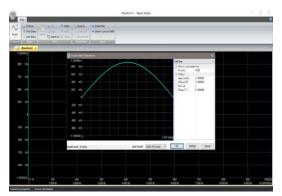
Channel merging can be realized with SUM or channel stacking functions, generating signals with adjustable signal-to-noise ratios and dual-tone multi-frequency signals. Up to four signals can be summed and coupled on two channels, and SUM enables the output of two-tone or multi-tone signals.

## **Channel Tracking**



Channel tracking simplifies the operation of dual channels. The phase, amplitude and frequency of both channels can be controlled by a single parameter, making it easy to create deviation or tracking signals.

# **Arbitrary Waveform Editor**



The arbitrary waveform editor offers diverse generation methods. Arbitrary waveforms can be created by inserting standard waveforms or drawing freely.

#### **Remote Control**



The instrument can connect to the computer via USB and LAN port and it supports remote control. Users can use the control software for remote operation and control, enabling automatic testing and remote monitoring.

# 4. 3inch Capacitive Touch Screen



4.3-inch high-definition display with touch operation, making instrument control faster and more convenient.

## **Definition and Condition**

- "Technical Index" provide a detailed description of the performance of the parameters which involved in the product warranty. Unless otherwise specified, these specifications are applicable to the temperature range from 18 °C to 28 °C.
- "Typical Value" refers to other product performance information which not covered in the product warranty. When performance exceeds the technical index, 80% of the units can exhibit 95% confidence in the temperature range of 18 °C to 28 °C. Typical performance does not include uncertainty of measurement.
- "Nominal Value" means the expected performance or describes the performance of the product that is useful in the application of the product but is not included in the scope of the product warranty.

Under the following conditions, it can achieve its technical indicators:

Within the calibration cycle and after being warmed up for at least 30 minutes. If the device is stored in an environment that is within the allowable storage temperature range but exceed the allowable operating temperature range, the instrument must be placed within the allowable operating temperature range for at least two hours

#### **Basic Waveform Characteristics**

All analog channel output related specifications is suitable for channel 1 and channel 2

Basic characterist	ics		
Model	UTG2062X	UTG2082X	UTG2122X
Channel	Dual channel		
Sampling rate	625 MSa/s (1.25 C	SSa/s, 2 x interpolation)	
Vertical resolution	16-bit		
Working modes	Continuous, Modula	ation, Frequency sweep,	Burst, and Counter
Wave	Sine, Square, Ramp	o, Pulse, Noise, DC, Arb,	Harmonic, PRBS, Expression,
vvave	and Double pulse		
Modulation	AM, FM, PM, DSB-	AM, ASK, FSK, PSK, 3F	SK, 4FSK, BPSK, QPSK, OSK,
Modulation	SUM, QAM, and PV	VM	
Frequency sweep	Lin, Log, and Step		
Burst	N-cycle, Gated, and Infinite		
Counter	100 mHz to 200 M	Hz, 7 digits	
LCD	4.3 inch TFT LCD o	capacitive touch display	screen, WVGA (480×272)

Frequency characte	eristic		
Sine wave	1 µHz to 60 MHz	1 μHz to 80 MHz	1 μHz to 120 MHz
Square wave	1 µHz to 30 MHz	1 µHz to 40 MHz	1 μHz to 50 MHz
pulse wave	1 µHz to 30 MHz	1 μHz to 40 MHz	1 μHz to 50 MHz
Ramp wave	1 µHz to 3 MHz	1 μHz to 4 MHz	1 μHz to 5 MHz
Arbitrary wave	1 μHz to 30 MHz	1 µHz to 40 MHz	1 μHz to 50 MHz
Harmonic	1 μHz to 30 MHz	1 µHz to 40 MHz	1 μHz to 50 MHz
Expression	1 µHz to 15 MHz	1 µHz to 20 MHz	1 μHz to 25 MHz
PRBS	1 µbps to 30 Mbps	1 µbps to 40 Mbps	1 µbps to 50 Mbps
Gauss noise	1 MHz to 60 MHz	1 MHz to 80 MHz	1 MHz to 120 MHz
Resolution	1 μHz		
	Frequency: 10.0000 MH	łz	
Reference frequency	Initial accuracy: ±0.5 pp	om, 25°C	
Reference frequency	Temperature stability: ±	0.5 ppm, 0°C to 40°C	
	Annual aging rate: ±1 p	pm, First year aging rate	
Sine wave			
Frequency	1 µHz to 60 MHz	1 μHz to 80 MHz	1 μHz to 120 MHz
		DC to 1 MHz: -70 dBc	
	Typical value (0 dBm)	1 MHz to 10 MHz: -65 c	dBc
Harmonic distortion		10 MHz to 40 MHz: -60	) dBc
		40 MHz to 80 MHz: -55	5 dBc
		80 MHz to 120 MHz: -5	0 dBc
THD	< 0.07% (DC to 20 kHz, 1 Vpp)		
Spurious signal	Typical value (0 dBm)	≤10 MHz ,< -70 dBc	
(anharmonic)	Typical value (0 dbill)	>10 MHz ,<-70 dBc+6	dB/octave
Phase noise(typical)	10 MHz: ≤-125 dBc/Hz (typical, 0 dBm, 10 kHz deviation)		
Square wave			
Frequency	1 µHz to 30 MHz	1 μHz to 40 MHz	1 μHz to 50 MHz
Rise/fall time	<7 ns (typical, 1 kHz)	<6 ns (typical, 1 kHz)	<5 ns (typical, 1 kHz)
(1 Vpp, 50 Ω)	, (ypiosi, 1 (1)2/	(typiosi, i ii iz)	(yp. 660, 1 10.12)
Overshoot (100kHz, 1 Vpp)	< 2% (typical, 50 Ω)		
Duty ratio	0.001% to 99.999% (limited by current frequency)		
Symmetry (duty ratio=50%)	1% of period + 4 ns		
Jitter(RMS) (1 Vpp,	Typical (1 MHz,	≤ 5 MHz:2 ppm + 200	ps

50 Ω)	1 Vpp, 50 Ω)	> 5 MHz:200 ps	
Ramp wave			
Frequency	1 µHz to 3 MHz	1 μHz to 4 MHz	1 μHz to 5 MHz
Non-linearity	< 1% of peak output (ty	pical value, 1 kHz, 1 Vpp,	symmetry 100%)
Symmetry	0.0% to 100.0%		
Pulse wave			
Frequency	1 µHz to 30 MHz	1 µHz to 40 MHz	1 μHz to 50 MHz
Minimum pulse width	8 ns		
Variable edge	7 ns to 10 s	6 ns to 10 s	5 ns to 10 s
Duty ratio	0.001% to 99.999% (lim	ited by current frequency	у)
Overshoot	< 2% (typical, 1 Vpp 50	Ω)	
Jitter	150 ps		
Arbitrary wave			
Frequency (DDS)	1 μHz to 30 MHz	1 μHz to 40 MHz	1 μHz to 50 MHz
	DDS	8 kpts (Regular)	
Wave length	Point by point	8 pts to 32 Mpts (Up to channel output)	o 64 Mpts for single
Vertical resolution	16-bit (symbol included)		
Sampling rago	DDS	625 MSa/s (DDS)	
Sampling rage	Point by point	1 μSa/s to 312.5 MSa/s	
Minimum rise/fall time	<5 ns (typical, 1 Vpp, 50	) Ω)	
Jitter (playback mode)	150 ps		
Nonvolatile storage	200 waves		
PRBS			
Bit rate	1 µbps to 30 Mbps	1 µbps to 40 Mbps	1 μbps to 50 Mbps
Edge time	7 ns to 1,000 s	6 ns to 1,000 s	5 ns to 1,000 s
Symbol	PN3, PN5, PN7, PN9, P PN27, PN29, PN31	N11, PN13, PN15, PN17, P	PN19, PN21, PN23, PN25,
Expression proper	ties		
Frequency	1 μHz to 15 MHz	1 μHz to 20 MHz	1 μHz to 25 MHz
Function	Sin, cos, tan, sinc, abs, l floor,lg,cosh	n, sqrt, acos, asin, atan, s	sinh, tanh, ceil, exp, fabs,
Operation	+ , - , * , / , ^		
Variable value	°, rad		

Harmonic			
Frequency	1 μHz to 30 MHz	1 μHz to 40 MHz	1 μHz to 50 MHz
Harmonic order	2 to 16		
Туре	Odd, Even, All, User De	fined	
Aparolituda	1 mV to 10 Vpp (50 Ω)		
Amplitude	Set the amplitude based	d on the selected harmo	onic sequence number
Dhasa	-360° to 360°		
Phase	Set the phase based on	the selected harmonic	sequence number
<b>Double Pulse</b>			
Trigger Source	Internal, external, manu	al	
Delay	0 to 100 s		
Total number	2 to 30		
Minimum pulse	20 ns		
width	20 115		
Variable edge	5 ns to 500 s		
Pulse gap	20 ns to 1 ks		

# **Output Characteristic**

Output			
A 11.	≤20 MHz:1 mVpp to 10 Vpp		
Amplitude (50 Ω)	≤60 MHz:1 mVpp to 5 Vpp		
(50 12)	≤120 MHz:1 mVpp to 2 Vpp		
A   :	≤20 MHz:2 mVpp to 20 Vpp		
Amplitude (High resistance)	≤60 MHz:2 mVpp to 10 Vpp		
(Fight resistance)	≤120 MHz:2 mVpp to 4 Vpp		
	Typical value(1kHz, sine		
Accuracy	wave, 0V, deviation,	± (1% of set value+1 mVpp)	
	>10 mVpp)		
	Typical value (1kHz, sine wave, 1 Vpp)	≤60 MHz: ±0.2 dB	
Amplitude flatness		≤80 MHz: ±0.4 dB	
		≤120 MHz: ±0.6 dB	
DC offset			
Danga(noak AC+DC)	±5 V (50 Ω)		
Range(peak AC+DC)	±10 V (High resistance)		
Accuracy of offset	Offset set value ±1% ± amplitude set value 0.5% ±2 mV		

Waveform output	
Impedance	50 $Ω$ typical value
Protection	Overvoltage protection, overload automatically disabling waveform
FIOLECTION	output

# **Modulation Types**

Model	UTG2062X	UTG2082X	UTG2122X
AM			
Carrier wave	Sine wave, square wa	ve, ramp wave, arbi	trary wave, and pulse wave
Source	Internal/External		
Modulation wave	Sine wave, square wa	ve, ramp wave, nois	se, and arbitrary wave
Modulation depth	0% to 120%		
Modulation frequency	2 mHz to 1 MHz (The	modulation source	is internal)
FM			
Carrier wave	Sine wave, square wa	ve, ramp wave, arbi	trary wave, and pulse wave
Source	Internal/External		
Modulation wave	Sine wave, square wa	ve, ramp wave, nois	se, and arbitrary wave
Frequency deviation	DC to 30 MHz	DC to 40 MHz	DC to 60 MHz
Modulation frequency	2 mHz to 1 MHz (The	modulation source	is internal)
PM			
Carrier wave	Sine wave, square wa	ve, ramp wave, and	arbitrary wave
Source	Internal/External		
Modulation wave	Sine wave, square wa	ve, ramp wave, nois	se, and arbitrary wave
Phase deviation	0 to 360°		
Modulation frequency	2 mHz to 1 MHz (The	modulation source	is internal)
DSB-AM			
Carrier wave	Sine wave, square wa	ve, ramp wave, arbi	trary wave, and pulse wave
Source	Internal/External		
Modulation wave	Sine wave, square wa	ve, ramp wave, nois	se, and arbitrary wave
Modulation depth	0% to 100%		
Modulation frequency	2 mHz to 1 MHz (The	modulation source	is internal)
ASK			
Carrier wave	Sine wave, square wa	ve, ramp wave, arbi	trary wave, and pulse wave
Source	Internal/external		
Modulation wave	Square wave (Duty ra	tio 50%)	

Modulation frequency	2 mHz to 1 MHz (The modulation source is internal)
FSK	
Carrier wave	Sine wave, square wave, ramp wave, arbitrary wave, and pulse wave
Source	Internal/external
Modulation wave	Square wave (Duty ratio 50%)
Hopping frequency	Carrier Frequency
Modulation frequency	2 mHz to 1 MHz (The modulation source is internal)
PSK	
Carrier wave	Sine wave, square wave, ramp wave, and arbitrary wave
Source	Internal/external
Modulation wave	Square wave (Duty ratio 50%)
Modulation frequency	2 mHz to 1 MHz (The modulation source is internal)
Phase	-360° to 360°
3FSK	
Carrier wave	Sine wave, square wave, ramp wave, arbitrary wave, and pulse wave
Source	Internal
Modulation wave	Square wave (Duty ratio 50%)
Hopping frequency	Carrier Frequency
Modulation frequency	2 mHz to 1 MHz(The modulation source is internal)
4FSK	
Carrier wave	Sine wave, square wave, ramp wave, arbitrary wave, and pulse wave
Source	Internal
Modulation wave	Square wave (Duty ratio 50%)
Hopping frequency	Carrier Frequency
Modulation frequency	2 mHz to 1 MHz (The modulation source is internal)
BPSK	
Carrier wave	Sine wave, square wave, ramp wave, and arbitrary wave
Source	Internal
Symbol	PN3, PN5, PN7, PN9, PN11, PN13, PN15, PN17, PN21, PN23, PN25, PN27, PN29, and PN31
Symbol bit rate	2 mbps to 1 Mbps (The modulation source is internal)
Phase	-360° to 360°
QPSK	
Carrier wave	Sine wave, square wave, ramp wave, and arbitrary wave
Source	Internal
Symbol	PN3, PN5, PN7, PN9, PN11, PN13, PN15, PN17, PN21, PN23, PN25,

	PN27, PN29, and PN31
Symbol bit rate	2 mbps to 1 Mbps (The modulation source is internal)
Phase	-360° to 360°
OSK	
Carrier wave	Sine wave
Source	Internal/external
Oscillation time	5 ns to 250 s
Modulation frequency	2 mHz to 1 MHz (The modulation source is internal)
SUM	
Carrier wave	Sine wave, square wave, ramp wave, arbitrary wave, pulse wave, harmonics, and noise
Source	Internal/External
Modulation wave	Sine wave, square wave, ramp wave, noise, and arbitrary wave
Modulation depth	0% to 100%
Modulation frequency	2 mHz to 1 MHz (The modulation source is internal)
QAM	
Carrier wave	Sine wave
Constellation mapping	QAM4, QAM8, QAM16, QAM32, QAM64, QAM128, and QAM256
Symbol	PN3, PN5, PN7, PN9, PN11, PN13, PN15, PN17, PN21, PN23, PN25, PN27, PN29, and PN31
Symbol bit rate	2 mbps to 1 Mbps
PWM	
Carrier wave	Pulse
Source	Internal/external
Modulation wave	Sine wave, square wave, ramp wave, noise, and arbitrary wave
PWM range	0% to 49.99%
Modulation frequency	2 mHz to 1 MHz (The modulation source is internal)

# **Sweep**

Frequency sweep	
Carrier wave	Sine wave, square wave, ramp wave, arbitrary wave, and pulse wave
Туре	Linear, Logarithmic, and Stepwise
Trigger Source	Internal, external, and manual
Trigger Edge	Rising edge, falling edge
Trigger Output	ON, OFF

Frequency sweep time	1 ms to 500 s ± 0.1% (Lin, Log)
Residence time	1 ms to 500 s ± 0.1% (step)
Step number	2 to 2,048 step

## **Burst**

Burst	
Waveform	Sine wave, square wave, ramp wave, pulse, and arbitrary wave
Mode of pulse train	N cycle, infinite, and gated
Initial and stop phase	-360° to 360°
Source	Manual, external, and internal
Trigger edge	Rising edge/falling edge
Trigger Output	ON, OFF
Internal cycle	1 us to 500 s ± 0.1%
Recurring number	1 to 50,000
Polarity	Positive and negative (TTL level input)

# **Auxiliary functions**

Channel settings	
Channel output	ON, OFF
Channel reverse	ON, OFF
Synchronous output	CH1, CH2, and OFF
Load	50 $\Omega$ , 75 $\Omega$ , HighZ, and Custom (1 $\Omega$ to 999999 $\Omega$ )
Amplitude limitation	ON, OFF
Upper limit of amplitude	-9.998 V to 10 V (HighZ)
Lower limit of amplitude	-10 V to 9.998 V (HighZ)
Channel replication	
Channel 1 replication	CH1→CH2
Channel 2 replication	CH2→CH1
Channel Follow	
Follow type	Parameter following, channel tracking
Parameter follow	Frequency following, amplitude following, and phase following
Follow type	Deviation, Ratio
Channel stacking	
Channel 1 overlay	ON, OFF

Channel 2 overlay	ON, OFF	
System settings		
Language	English, Chinese, and Deutsch	
Phase synchronization	Independent, synchronized	
Voice	ON, OFF	
Number separator	Comma, space, and none	
Backlight	10%, 30%, 50%, 70%, 90%, and 100%	
Screen saver	Off, 5 minutes, 15 minutes, 30 minutes, and 1 hour	
Frequency meter		
Measurement frequency	100 mHz to 200 MHz	
range	100 11112 to 200 11112	
Input Level Range	TTL compatibility	
Measurement accuracy	7 digits	

# **Interface and Display**

Interface			
Standard configuration	USB Host, USB Device, and LAN		
Synchronous signal output			
Output level	TTL compatible		
Frequency	1 μHz to 10 MHz		
Output Impedance	50 $\Omega$ (Typical)		
Coupling method	DC		
External modulation input			
Input frequency	<50 KHz		
Depth	±5 Vpk=100%		
Impedance	5 kΩ (Typical)		
External reference input			
Input frequency	10 MHz ± 50Hz		
Input level	TTL compatible		
Impedance	10 k $\Omega$ (Typical value, DC coupling)		
Lock time	<1 s		
Internal reference output			
Input frequency	10 MHz		
Input level	TTL compatible		
Impedance	50 $\Omega$ (Typical value, DC coupling)		

Trigger Input		
Input level	TTL compatible	
Slope	Rising or falling	
Pulse width	>100 ns	
Impedance	10 k $\Omega$ (Typical value, DC coupling)	
Response time	<1 us (Typical value)	
Trigger Output		
Input level	TTL compatible	
Pulse width	> 400 ns (Typical value)	
Impedance	50 Ω (Typical value)	
Display screen		
Display type	4.3 inches TFT LCD Capacitive Touch Screen	
Display resolution	WVGA (480×272)	

# **General Technical Specifications**

Specifications			
Supply voltage	100 to 240 VAC (Fluctuations: ±10%), 50 Hz/60 Hz;		
	100 to 120 VAC (Fluctuations: ±10%), 400 Hz		
Power consumption	< 50 W		
Fuse	2.5 A, Class T, 250 V		
Environment			
Temperature range	Operation: +10 °C to +40 °C		
	Non operational: -20 °C to +60 °C		
Cooling method	Natural cooling		
Llumiditu ranga	+35 °C Below: ≤90% relative humidity		
Humidity range	+35 °C to +40 °C: ≤60% relative humidity		
Altitude	Operating below 2, 000 m		
	Non-operating below 15, 000 m		
Class of pollution	2		
Operating environment	Indoor		
Mechanical specifications			
Dimensions	215mm×103mm×316mm (Width x Height x Length)		
Net weight	2.5 kg		
Calibration cycle	The recommended calibration cycle is one year		
Regulatory standards			

EMC	Compliance with EMC directives (2014/30/EU), Conform to or better than IEC 61326-1:2021/EN61326-1:2021, IEC 61326-2-1:2021/EN61326-2-1:2021			
Conductive disturbance	CISPR 11/EN 55011	CLASS B group 1, 150 kHz-30 MHz		
Radiation disturbance	CISPR 11/EN 55011	CLASS B group 1, 30 MHz-1 GHz		
Electrostatic discharge (ESD)	IEC 61000-4-2/EN 61000-4-2	4.0 kV (Contact), 8.0 kV (air)		
Radio frequency	IEC 61000-4-3/EN	0 V/m (80 MHz to 1 GHz);		
electromagnetic field	61000-4-3/EN	3 V/m (1.4 GHz to 2 GHz);		
immunity	01000-4-3	1 V/m (2.0 GHz to 2.7 GHz)		
Electrical fast transient	IEC 61000-4-4/EN	2 kV (AC input port)		
burst (EFT)	61000-4-4	2 KV (AC III)ut port/		
Curao	IEC 61000-4-5/EN	1 kV (Live line to zero line)		
Surge	61000-4-5	2 kV (Fire/zero line to ground)		
Immunity to RF continuous	IEC 61000-4-6/EN	3 V, 0.15-80 MHz		
conduction	61000-4-6	3 4, 0.13 00 14112		
		Voltage dip:		
	IEC 61000-4-11/EN 61000-4-11	0% UT during 1 cycle;		
Voltage dips and short		40% UT during 10/12 cycles;		
interruptions		70% UT during 25/30 cycles		
		Short Interruption:0% UT during		
		250/300 cycles		
Safety regulations				
	EN 61010-1:2010+A1:2019			
	EN IEC61010-2-030:2021+A11:2021			
	BS EN61010-1:2010+A1:2019			
	BS EN IEC61010-2-030:2021+A11:2021			
	UL 61010-1:2012 Ed.3+ R:19 Jul2019			
	UL 61010-2-030:2018 Ed.2			
	CSA C22.2#61010-1:2012 Ed.3+U1;U2;A1			
	CSA C22.2#61010-2-030:2018 Ed.2			

# **Ordering Information**

	Description	Order No.
	Maximum output frequency 60 MHz	UTG2062X
Models	Maximum output frequency 80 MHz	UTG2082X
	Maximum output frequency 120 MHz	UTG2122X
	Power cord x 1	
	USB cable x 1	UT-D14
Standard accessories	BNC-BNC x 1	UT-L45
	BNCred and black alligator clip cable x1	UT-L02A
Recommended options	10 W Power amplifier option	UT-M14

Remarks: All mainframes, accessories, and optional items can be ordered from the local UNI-T distributor.

# **Limited Warranty and Liability**

Uni-T guarantees that the Instrument product is free from any defect in material and workmanship within three years from the purchase date. This warranty does not apply to damages caused by accident, negligence, misuse, modification, contamination or improper handling. If you need warranty service within the warranty period, please contact your seller directly. Uni-T will not be responsible for any special, indirect, incidental or subsequent damage or loss caused by using this device. For the probes and accessories, the warranty period is one year. Visit instrument.uni-trend.com for full warranty information.



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