

UTG4122A Function/Arbitrary Waveform Generator

Features and Benefits:

1. 100MHz/120MHz/160MHz sine waveform output, 1 μ Hz full-band resolution ;
2. 30MHz/40MHz/50MHz pulse waveform, adjustable rise/fall time ;
3. 500MSa/s sample rate, 14bit vertical resolution ;
4. Standard dual channels, supporting stand-alone or channel-coupling output mode ;
5. 512k points arbitrary waveform storage, 8 waveforms for nonvolatile memory ;
6. Versatile modulation choices: AM,FM,PM,ASK,FSK,PSK,BPSK,QPSK,OSK,PWM ;
7. 8 Inches high resolution color TFT display ;
8. Standard Ports: USB Host, USB Device, LAN,10MHz input/output.



Technical Specifications:

General Specifications	
Model	UTG4122A
Channels	2
Max. Frequency	120MHz
Sample Rate	500MSa/s
Waveforms	Sine, Square, Ramp, Harmonic, Pulse,Noise,DC, Arbitrary Waveforms
Working Mode	Output Gate, Continuous, Modulate, Frequency Sweep, Burst
Modulation Types	AM,FM,PM,ASK,FSK,PSK,BPSK,OSK,PWM
Frequency Characteristics	
Sine	1 μ Hz ~ 120MHz
Square	1 μ Hz ~ 40MHz
Pulse	1 μ Hz ~ 40MHz
Ramp	1 μ Hz ~ 3MHz
Harmonic	1 μ Hz ~ 50MHz
Noise(-3dB)	120MHz Bandwidth
Resolution	1 μ Hz
Arbitrary Wave	
Waveform Length	2 ~ 512k points
Vertical Resolution	14bits(symbols included)
Sample Rate	500MSa/s

Min Fall/Rise Time	5ns, Typical
Jitter(RMS)(typical)	6ns+30ppm
Nonvolatile Memory	8 waveforms
Output Characteristics	
Amplitude Range (50Ω)	≤ 20MHz : 1mVpp ~ 10Vpp ; ≤ 100MHz : 1mVpp ~ 5Vpp ; ≤ 120MHz : 1mVpp ~ 2.5Vpp ; ≤ 160MHz : 1mVpp ~ 1Vpp ;
Accuracy(1kHz sine)	±(1% of setting value+1mVpp)
Amplitude Flatness (with reference to 1kHz sine wave, 5Vpp)	≤ 10MHz : ±0.1dB ; ≤ 100MHz : ±0.2dB ; ≤ 120MHz : ±0.4dB ; ≤ 160MHz : ±0.8dB
DC Offset	
Range(Peak AC+DC)	±5V(50Ω) ; ±10V (High resistance)
Offset Accuracy	±(2% of Offset setting+ 0.5% of amplitude +2mV)
Waveform Output	
Impedance	50Ω, typical
Isolation	42Vpk maximum to earth
Protection	Short-circuited protection, waveform output disabled automatically when overloaded.
Connector on Back Panel	
Modulation Input	
External AM Modulation	±5Vpk full-scale ; 5kΩ input impedance
Input/Output Frequency Range	10MHz±500Hz
Input/Output Level Range	80mVpp ~ 10Vpp/0dB, (typical)
Input/Output Impedance	2kΩ/50Ω, typical, AC coupled

Lock Time	< 1s
External Trigger	TTL Compatible
Trigger Input	
Input Level	TTL Compatible
Slope	Rise or Fall, selectable
Pulse Width	> 50ns
Input Impedance	> 10k Ω , DC-coupled
Linear Sweep	< 100ns, Typical
Burst Delay	< 300ns, Typical
Trigger Output	
Level	TTL Compatible, to 50 Ω
Pulse Width	> 60ns, Typical
Output Impedance	50 Ω , Typical
Max. Frequency	1MHz
Sync Output	
Input Level	TTL Compatible
Output Impedance	50 Ω
Frequency Counter	
Level	TTL Compatible
Input Frequency	100mHz ~ 200MHz
Accuracy	\pm 51ppm
Frequency Resolution	7 bit/s

General Characteristics	
Power	100 ~ 240 VAC, 45 ~ 440Hz
Display	8 Inches, TFT LCD, WVGA(800 × 480)
Product Color	White and Gray
Product Net Weight	3.5 Kg
Product Size (W×H×D)	336mm × 163.8mm × 105mm
Standard Accessories	BNC Cable, Power Cord, USB Cable,PC Software CD
Standard Individual Packing	Gift Box, English Manual
Standard Quantity Per Carton	2 PCs
Standard Carton Measurement (L×W×H)	675mm × 240mm × 350mm
Standard Carton Cross Weight	9.5 Kg
Optional Accessories*	Digital Interface