



## 2 input channel, 2 output channel difference audio analyzer

U962 is an audio analyzer designed for mass production electroacoustic test of production line. With its excellent electrical characteristics and excellent price advantages, it is extremely suitable for low voltage PCBA testing of consumer electroacoustics, such as Bluetooth headset PCBA and typec headset PCBA.

U 962 with PM 0083 signal conditioner can also realize flexible acoustic test.

### General specifications

Overall parameters	
Analog input channel	2
Analog output channel	2
Bus	USB
Dimension(mm)	96*33*140
Connection type	BNC
Working temperature	-20℃~50℃

### General features

- 2 analog input channel, 2 analog output channel
- Differential signal
- Positioning small voltage signal electroacoustic test

### AI Analog acquisition channel parameter

AI channel parameters	
ADC precision	24 Bit
ADC type	$\Delta - \Sigma$
Sampling rate range	12.8k, 48k, 96k, 102.4k
FIFO Buffer size	1024
Data transmission mode	DMA
Input voltage range	+/- 1Vrms
Gain error	+/- 0.03dB
Input impedance	Positive input to negative input: 4Mohm Between positive input and ground: 2Mohm
Flatness	20Hz~20kHz, $< \pm 0.1\text{dB}$ 10Hz~60kHz, $< \pm 1\text{dB}$

AI Idle noise (uVrms)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	4	4	4
Annotation: [1]Short circuit source impedance is less than 50 $\Omega$ , Working temperature 23 $\pm$ 5℃			

AI SNR (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	105	104	104

Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, 0dBFS(1Vrms)  
 [2]Bandwidth is 22.4K、45K、51K  
 [3]Linear weight

AI dynamic range (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Minimum value	105	102	102

Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(0.89Vrms)  
 [2]Bandwidth is 22.4K、45K、51K  
 [3]Linear weight

AI THD+N (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-92	-91	-91
Maximum value	-89	-88	-88

Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(0.89Vrms)  
 [2]Bandwidth is 22.4K、45K、51K  
 [3]Linear weight

AI THD (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-94	-93	-93
Maximum value	-91	-90	-90

Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(0.89Vrms)  
 [2]Bandwidth is 22.4K、45K、51K  
 [3]Linear weight

AI Cross talk (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-106	-104	-104
Maximum value	-104	-102	-102

Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(0.89Vrms)  
 [2]Bandwidth is 22.4K、45K、51K  
 [3]Linear weight

## AO Analog acquisition channel parameter

AO Analog acquisition channel	
DAC precision	32 Bit
Sampling rate range	102.4k, 96k, 48k, 12.8k
Output voltage range	+/- 3Vrms
Gain error	+/- 0.03dB
Output impedance	Positive input to negative input: 1ohm
Flatness	20Hz~20kHz, <math>\lt; \pm 0.1\text{dB}</math> 10Hz~60KHz, <math>\lt; \pm 1.5\text{dB}</math>

AO Idle noise (uVrms)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	10	10	10
Maximum value	12	12	12
Annotation: [1]Acquisition device impedance is greater than 1Mohm, Working temperature:23±5°C			

AO Dynamic range (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	105	105	103
Minimum value	103	103	101
Annotation: [1]]Differential output, AC coupling, out signal 1kHz Sine wave, -1dBFS(2.67Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AO THD+N (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-91	-92	-90
Maximum value	-89	-90	-88
Annotation: [1]]Differential output, AC coupling, out signal 1kHz Sine wave, -1dBFS(2.67Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AO THD (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-93	-92	-92
Maximum value	-90	-89	-89
Annotation: [1]]Differential output, AC coupling, out signal 1kHz Sine wave, -1dBFS(2.67Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AO Cross talk (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Maximum value	98	98	98
Annotation: [1]]Differential output, AC coupling, out signal 1kHz Sine wave, -1dBFS(2.67Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

Product specifications are subject to  
change without prior notice



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