High-performance Audio Analyzer with a High Degree of Flexibility at an Affordable Price

The RTX6001 Audio Analyzer is a versatile test solution for development as well as production. With its dual, high-performance analog inputs and outputs, the RTX6001 enables precision measurements of analog audio signals and systems. In many respects it outperforms much more expensive analyzers.

The RTX6001 Audio Analyzer works as a high-quality sound card with analyzer software running on a PC. A USB connection provides for easy connection to any PC with a high-speed USB 2.0 interface.

Input/output attenuators and gain stages allow a wide range of I/O levels. Superior analog circuits and converters provide a wide dynamic range. The analog I/O's are balanced, but can also be used in a single-ended configuration. The measurement system is galvanically isolated from the PC to avoid ground loops and electrical noise from the PC.

The PC and software can be upgraded when needed, since the interface to the RTX6001 Audio Analyzer is based on a standard USB connection. The RTX6001 works as a front-end to the PC analyzer software. The test signals are defined by the PC software.

Available PC analyzer software include HpW Works, MATAA, AudioTester, SpectraPlus, VisualAnalyzer, REW, Arta, Steps, and RightMark.

You want to use special test signals not readily available on standard testers? No problem. Define the signals using your choice of PC audio application. Signals can be generated and recorded at sample rates up to 192 kHz.

The RTX6001 Audio Analyzer comes with an ASIO 2.2 compliant driver for Windows PC's. MAC and Linux PC's are supported.

Features

- Very low residual noise and distortion
- High resolution 32 bit D/A converter
- High-resolution 24 bit A/D converter
- Sample rates up to 192 kHz
- Analog inputs and outputs
- No acoustic noise (no fan)
- PC based user interface
- PC connected via USB 2.0 High Speed
- Works with users' choice of PC analyzer software allowing a high degree of
- flexibility
- ASIO interface for interface to a large variety of PC audio applications, incl. recording and playback
- Superior price/performance ratio

DATA SHEET

TECHNICAL SPECIFICATIONS

SYSTEM PERFORMANCE	SPECIFICATIONS
Sample rates	44.1 - 192 kHz
Loopback THD at 1 kHz 1 V balanced	-124 dB typical
Frequency accuracy	Better than 30 ppm
PC interface	USB 2.0 high-speed, ASIO 2.2 compliant driver
GENERATOR PERFORMANCE	**SPECIFICATIONS**
Frequency range	DC - 96 kHz
Maximum output level (sine wave)	10 Vrms balanced; 5 Vrms single ended
Output impedance, unbalanced	50 Ω
Test signals	Determined by PC software
Output course level control	3 steps with 20 dB / step
Amplitude accuracy	±0.1 dB
Flatness (DC - 20 kHz)	±0.01 dB
Analog output configurations	Unbalanced and balanced
ANALYZER PERFORMANCE	**SPECIFICATIONS**
Bandwidth	1 Hz - 90 kHz
Maximum rated input voltage	100 Vrms (150 V peak)
Input impedance	100 kΩ / 37 pF unbalanced
Input gain control	100 mV to 100 V in 10 dB steps
Amplitude accuracy	±0.05 dB
Flatness (20 Hz - 20 kHz)	±0.01 dB
Residual input noise (20 kHz BW) unweighted	≤0.75 µV (-122 dBV) (5nV/rtHz)
Analog input configuration	Differential
Measurement capability	Determined by PC software
Maximum FFT length	Determined by PC software
CONNECTIONS	**SPECIFICATIONS**
Analog outputs	2 XLR, 2 BNC
Analog inputs	2 XLR
Digital audio & control	USB 2.0 high-speed
Isolation	Measurement section electrically isolated from USB connection
GENERAL DATA	**SPECIFICATIONS**
Power supply	200 - 240 V AC / 100 - 120 V AC; 50 - 60 Hz
Power consumption	40 W max.
Dimensions (WxHxD)	257.5 x 115 x 364 mm (approx. 10⅛ x 4½ x 14⅜ in)
Weight	4.4 kg (9 lb 11 oz)

ORDERING DETAILS

RTX NO.	DESCRIPTION
95101365	RTX6001 Audio analyzer

RTX A/S • Stroemmen 6 • 9400 Noerresundby • Denmark • Phone: +45 9632 2300 • sales@rtx.dk • www.rtx.dk
RTX America, Inc. • 10620 Treena Street, Suite 230 • San Diego, CA 92131 • USA • Phone: +1 (408) 441 8600